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ABSTRACT

The data presented in this report show trends in doctorate awards by science engineering field and recipient characteristics, institutions awarding doctorates, and postgraduation plans of recipients. The source of the data is the Survey of Earned Doctorates (SED) conducted annually for the National Science Foundation (NSF) and four other Federal agencies by the National Research Council. (JRH)

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Selected Data on Science and Engineering Doctorate Awards 1994

Selected Data Tables

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National Science Foundation

NSF 95-337

Selected Data on Science and Engineering Doctorate Awards

1994

Selected Data Tables

Susan T. Hill, Project Officer

Division of Science Resources Studies
Directorate for Social, Behavioral and Economic Sciences

National Science Foundation

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Contributors

Tabulations were performed by Barbara DePaul and Teresa Grimes of the Quantum Research Corporation under contract to the National Science Foundation. The Project Officer for this report was Susan T. Hill.

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General Notes

The data presented in this report show trends in doctorate awards by science and engineering (S&E) field and recipient characteristics, institutions awarding doctorates, and postgraduation plans of recipients. The source of the data is the Survey of Earned Doctorates (SED).

The SED is conducted annually for the National Science Foundation (NSF) and four other Federal agencies by the National Research Council. Information from this survey becomes part of the Doctorate Records File, which is a census of recipients of research doctorates awarded since 1920 by regionally accredited universities and colleges. Doctoral degrees such as the Ph.D. or D. Sc. are included in these surveys, but first-professional degrees such as the J.D. or M.D. are not.

Data for the SED are collected directly from the individual doctorate recipients. The questionnaire is distributed to them through the cooperation of the graduate deans to persons as they are completing their doctorate. The data for a given year include all doctorates awarded in the 12-month period ending on June 30 of that year.

These tables present detailed data on (S&E) doctorate recipients, with some totals provided for broad non-S&E fields. Detailed data on non-S&E fields are published by the National Research Council and by other Federal sponsors of the Survey of Earned Doctorates. The groupings of field specialties into broad fields may differ among the sponsoring agencies according to their missions.

Approximately 95 percent of the annual cohort of doctorate recipients in 1994 responded to the questionnaire. Over the decade, though, the response rate ranged from 95 percent in 1985 to 91 percent in 1989 and 95 percent in 1994. Note that most of the numbers presented are actual self-reports, as there are no adjustments for nonresponse. For the nonrespondents, partial data from public sources are added to the file for nonrespondents; therefore complete counts are presented for conferred doctorates by field of study and sex of recipient. Although some tables present data subject to nonresponse, the estimates represent the conservative known estimate for any data item. Therefore, small changes in numbers should be interpreted with caution, as numerical trends are affected by fluctuations in response rates. Thus, declines and increases may appear greater than they actually are.

Additional detailed tabulations will be available soon. For further information on the availability of data for S&E doctorate recipients, please contact—

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Table 1. Science and engineering (S&E) doctorates awarded, by field of study and year of doctorate: 1985-94

Field of study	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
S&E, total	18,936	19,437	19,894	20,933	21,731	22,867	24,019	24,673	25,444	26,211
Engineering, total	3,166	3,376	3,712	4,187	4,543	4,894	5,215	5,438	5,698	5,826
Aeronautical/astronautical engineering	124	118	142	150	178	192	207	234	228	230
Chemical engineering	504	531	584	685	712	658	691	725	737	725
Chemical	440	476	527	624	625	561	621	607	624	630
Petroleum	24	18	23	33	29	49	28	54	52	42
Polymer/plastics[1]	40	37	34	28	58	48	42	64	61	53
Civil engineering	391	429	477	531	538	553	575	594	624	684
Civil	358	387	441	488	498	505	509	540	563	602
Environmental health	33	42	36	43	40	48	66	54	61	82
Electrical engineering	716	806	779	1,010	1,137	1,276	1,405	1,483	1,542	1,675
Communications	30	23	26	24	25	35	21	30	22	33
Computer	55	77	62	100	117	131	178	175	167	202
Electrical/electronics	631	706	691	886	995	1,110	1,206	1,278	1,353	1,440
Industrial/manufacturing engineering[2]	92	101	120	127	162	151	165	196	236	228
Materials/metallurgical engineering	303	305	392	374	380	440	489	485	535	539
Ceramic sciences[3]	19	25	42	30	35	43	58	42	42	39
Materials science	188	187	238	252	257	307	361	365	416	433
Metallurgical	96	93	112	92	88	90	70	78	77	67
Mechanical engineering	513	536	657	715	760	884	875	987	1,031	1,015
Mechanical	424	442	544	610	650	773	762	855	903	883
Engineering mechanics	89	94	113	105	110	111	113	132	128	132
Other engineering	523	550	561	595	676	740	808	734	765	730
Agricultural	60	52	74	70	102	101	84	84	86	89
Bioengineering/biomedical	69	67	75	114	115	129	149	147	171	175
Engineering physics	12	13	13	9	16	16	23	25	21	17
Engineering science	31	30	26	32	27	37	42	51	55	46
Mining/mineral	16	22	27	17	33	39	38	26	24	23
Naval architecture/marine[4]	8	9	7	9	9	8	5	N/A	N/A	N/A
Nuclear	96	98	84	104	86	114	107	120	108	85
Ocean	25	14	24	21	20	17	21	21	24	29
Operations research	54	54	51	44	68	46	76	56	56	47
Systems	57	33	47	44	30	51	48	37	57	51
Engineering, general	26	55	54	49	61	75	78	64	47	39
Engineering, other	69	103	79	82	109	107	137	103	116	129
Sciences, total	15,770	16,061	16,182	16,746	17,188	17,973	18,804	19,235	19,746	20,385
Physical sciences, total	2,934	3,120	3,238	3,350	3,261	3,524	3,625	3,780	3,700	3,975
Astronomy	100	109	100	130	113	128	125	134	145	143
Astronomy	43	52	46	66	49	52	50	55	76	65
Astrophysics	57	57	54	64	64	76	75	79	69	78
Chemistry	1,836	1,903	1,975	2,015	1,970	2,100	2,193	2,213	2,138	2,254
Analytical	285	257	314	301	289	293	304	304	286	333
Inorganic	251	260	240	250	256	242	260	268	237	262
Medicinal/pharmaceutical[5]	60	58	65	73	64	48	82	68	99	102
Nuclear	7	18	13	7	6	13	14	7	8	10
Organic	494	511	511	531	511	452	538	512	518	543
Physical	304	293	302	318	310	325	364	398	336	333
Polymer	84	72	96	81	78	81	111	83	107	117
Theoretical	48	41	46	50	46	55	45	59	53	52
Chemistry, general	213	289	297	310	312	524	400	449	432	447
Chemistry, other	90	104	91	94	98	67	75	65	62	55

See explanatory information, if any, and SOURCE at end of table.

Table 1. Science and engineering (S&E) doctorates awarded, by field of study and year of doctorate: 1985-94

Field of study	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Physics	980	1,078	1,137	1,172	1,161	1,265	1,286	1,403	1,399	1,549
Acoustics	10	15	17	16	15	21	13	18	27	20
Chemical & atomic/molecular[6]	58	70	79	77	74	87	76	85	95	140
Electron[4]	4	2	6	2	4	2	1	N/A	N/A	N/A
Elementary particle	154	147	159	174	135	163	182	153	170	176
Fluids	16	6	21	17	14	17	14	17	19	12
Nuclear	86	89	74	88	81	73	66	86	82	90
Optics	51	58	50	65	78	76	85	94	96	104
Plasma & high-temperature[7]	55	61	72	65	61	42	58	65	62	79
Polymer	11	11	15	20	7	11	17	17	29	29
Solid state & low-temperature[8]	248	280	287	252	296	306	372	408	336	388
Physics, general	176	222	238	271	269	323	247	297	340	343
Physics, other	111	117	119	125	127	144	155	163	143	168
Other physical sciences	18	30	26	33	17	31	21	30	18	29
Earth, atmospheric, and ocean sciences, total	599	559	602	695	723	738	815	794	771	824
Atmospheric sciences	80	78	87	103	87	83	108	120	99	129
Atmospheric dynamics	21	16	17	25	16	20	21	23	23	27
Atmospheric physics/chemistry	16	21	24	19	15	18	20	36	13	27
Meteorology	23	27	17	35	27	20	31	28	34	32
Atmospheric science/meteorology, general	10	7	16	14	14	23	26	27	22	37
Atmospheric science/meteorology, other	10	7	13	10	15	2	10	6	7	6
Geosciences	385	346	375	425	455	477	560	503	479	509
Applied geology[4]	8	4	5	7	6	6	1	N/A	N/A	N/A
Geology	111	118	114	144	165	166	192	166	197	194
Geochemistry	48	37	31	46	59	56	64	62	50	59
Geomorphology/glacial geology	13	11	18	9	10	14	18	12	16	13
Geophysics/seismology	92	89	75	83	87	91	117	108	101	106
Hydrology/water resources	17	16	18	24	24	13	16	29	25	30
Mineralogy/petrology	28	17	24	19	36	26	36	29	9	21
Paleontology	23	16	21	24	17	21	24	25	21	17
Stratigraphy/sedimentation	23	14	22	30	24	25	29	23	28	27
Geological & related sciences, general	11	12	18	8	19	31	30	18	15	18
Geological & related sciences, other	11	12	29	31	28	28	33	31	17	24
Oceanography	92	100	111	109	113	128	112	114	125	125
Marine sciences	24	22	38	28	26	39	27	32	27	34
Oceanography	68	78	73	81	87	89	85	82	98	91
Other environmental sciences	42	35	29	58	68	50	35	57	68	61
Mathematical/computer sciences, total	998	1,128	1,190	1,264	1,471	1,597	1,839	1,927	2,026	2,022
Mathematics, total	688	729	740	749	859	892	1,039	1,058	1,146	1,118
Algebra	55	46	57	54	50	39	72	69	84	74
Analysis/functional analysis	83	81	86	76	103	90	132	105	105	105
Applied mathematics	116	135	131	142	158	185	193	213	188	204
Computing theory	15	10	14	12	12	12	19	12	18	16
Geometry	35	38	30	44	47	42	66	45	44	34
Logic	30	23	18	20	12	19	23	28	19	29
Mathematical statistics[9]	150	141	143	152	167	157	206	217	228	204
Number theory	18	20	15	26	23	26	30	25	42	36
Operations research	22	29	22	29	22	29	16	22	37	26
Topology	35	34	41	27	37	50	57	58	54	35
Mathematics, general	85	125	137	134	177	191	180	209	276	284
Mathematics, other	44	47	46	33	51	52	45	55	51	71
Computer sciences, total	310	399	450	515	612	705	800	869	880	904
Computer science	249	355	384	442	519	612	720	791	825	834
Information science/systems	61	44	66	73	93	93	80	78	55	70

See explanatory information, if any, and SOURCE at end of table.

Table 1. Science and engineering (S&E) doctorates awarded, by field of study and year of doctorate: 1985-94

Field of study	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Biological/agricultural sciences, total	4,904	4,804	4,815	5,127	5,201	5,501	5,719	5,861	6,059	6,275
Biological sciences, total	3,793	3,807	3,839	4,112	4,115	4,327	4,646	4,798	5,091	5,197
Bacteriology	17	12	13	7	11	15	11	13	14	18
Biochemistry	581	576	573	613	669	678	765	715	846	805
Biophysics	69	72	86	97	87	103	100	125	103	123
Biotechnology research [10]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	14
Plant genetics	31	20	26	26	18	31	23	33	41	30
Plant pathology	38	28	33	30	22	37	50	32	41	40
Plant physiology	58	52	62	74	47	51	65	68	48	70
Botany, other	120	121	106	112	117	104	105	107	105	117
Anatomy	135	86	92	88	80	70	77	75	76	66
Biometrics/biostatistics	40	30	37	47	46	47	59	63	74	71
Cell biology	100	130	127	118	133	145	149	188	231	236
Developmental biology/ embryology [11]	15	9	6	7	10	22	37	48	57	62
Ecology	200	183	158	155	161	166	189	180	176	201
Endocrinology	17	17	19	21	21	24	33	27	16	26
Entomology	173	170	123	133	139	147	138	139	114	123
Biological immunology [12]	124	146	136	179	152	153	177	181	169	161
Microbiology	289	326	301	333	340	335	372	377	433	423
Molecular biology	277	298	303	364	413	413	481	527	582	597
Neuroscience	156	120	153	163	181	192	238	238	276	284
Nutritional sciences	113	122	141	127	128	118	106	132	134	147
Parasitology	21	25	16	20	20	13	20	17	17	22
Toxicology	99	104	115	108	111	91	86	105	100	119
Human/animal genetics	105	91	113	118	112	153	160	142	172	203
Human/animal pathology	110	91	127	112	105	101	122	114	130	129
Human/animal pharmacology	235	245	234	252	241	243	262	278	273	256
Human/animal physiology	245	240	248	225	272	278	272	266	271	287
Zoology, other	147	155	139	167	132	122	125	134	114	117
Biological sciences, general	190	213	229	256	231	333	278	315	306	289
Biological sciences, other	88	125	123	160	116	142	146	159	164	161
Agricultural sciences, total	1,111	997	976	1,015	1,086	1,174	1,073	1,063	968	1,078
Agronomy & crop science [13]	158	159	143	141	140	143	117	123	104	143
Animal breeding/genetics	28	25	23	27	23	22	18	23	18	17
Animal nutrition	78	65	82	54	67	54	57	41	52	58
Dairy science [14]	N/A	N/A	N/A	12	16	20	19	14	11	11
Poultry science [14]	N/A	N/A	N/A	10	11	17	13	22	16	21
Animal sciences, other	95	91	76	86	95	90	92	97	74	86
Fisheries science & management [15]	36	31	32	42	34	42	39	26	38	48
Wildlife/range management [16]	38	20	23	39	52	58	59	55	54	52
Food science [17]	136	121	131	16	1	N/A	N/A	N/A	N/A	N/A
Food engineering [17]	N/A	N/A	N/A	6	11	10	12	14	9	16
Food sciences, other [17]	N/A	N/A	N/A	119	147	141	137	151	141	153
Forestry science [18]	105	88	100	15	N/A	N/A	N/A	N/A	N/A	N/A
Forest biology [18]	N/A	N/A	N/A	21	22	27	17	29	18	20
Forest engineering [18]	N/A	N/A	N/A	3	1	2	2	2	3	0
Forest management [18]	N/A	N/A	N/A	18	21	14	22	16	17	17
Wood science & pulp/paper technology [18]	N/A	N/A	N/A	7	16	16	16	21	20	26
Conservation/renewable natural resources [18]	N/A	N/A	N/A	7	12	16	19	9	13	21
Forestry & related sciences, other [18]	N/A	N/A	N/A	35	57	62	45	62	55	59
Horticulture science	76	60	71	61	75	101	78	65	62	65
Plant breeding/genetics	88	78	70	83	64	87	69	82	68	81
Plant pathology	89	85	76	46	63	64	90	63	58	55
Plant protection-pest management [19]	N/A	N/A	N/A	1	6	4	2	N/A	N/A	N/A
Plant sciences, other	21	22	20	23	15	23	17	29	28	24
Soil sciences [20]	97	103	74	18	N/A	N/A	N/A	N/A	N/A	N/A
Soil chemistry/ microbiology [20]	N/A	N/A	N/A	33	28	27	24	24	26	21
Soil sciences, other [20]	N/A	N/A	N/A	62	75	91	78	63	59	69
Agricultural sciences, general	5	4	5	9	7	5	3	9	10	4
Agricultural sciences, other	61	45	50	21	27	38	28	23	14	11

See explanatory information, if any, and SOURCE at end of table.

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Table 1. Science and engineering (S&E) doctorates awarded, by field of study and year of doctorate: 1985-94

Field of study	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Psychology, total	3,118	3,126	3,173	3,074	3,208	3,281	3,250	3,263	3,421	3,389
Clinical	1,181	1,173	1,214	1,095	1,259	1,337	1,305	1,309	1,374	1,289
Cognitive psychology & psycholinguistics [21]	76	70	80	83	79	76	94	101	104	129
Comparative	11	14	9	7	8	8	7	2	5	8
Counseling	431	449	486	482	501	466	497	507	488	496
Developmental & child [22]	175	184	200	176	148	159	155	170	202	181
Educational	127	106	89	103	105	98	110	91	91	69
Experimental	165	147	146	135	146	143	142	154	143	140
Industrial/organizational	102	110	107	118	104	126	142	138	158	137
Physiological/ psychobiology [23]	79	73	69	85	62	46	45	55	85	93
Quantitative	16	23	13	12	11	15	7	10	16	17
Personality	21	16	25	18	28	20	13	17	22	19
Psychometrics	10	11	9	11	6	8	9	5	9	5
School	92	116	93	115	107	82	82	88	95	84
Social	167	141	133	140	128	145	147	139	126	153
Psychology, general	266	309	343	368	364	371	324	295	306	284
Psychology, other	199	184	157	126	152	181	171	182	197	285
Social sciences, total	3,217	3,324	3,164	3,236	3,324	3,332	3,556	3,610	3,769	3,900
Economics	959	1,019	960	1,008	1,062	1,007	1,053	1,051	1,067	1,102
Agricultural economics	148	160	139	156	164	145	168	141	137	162
Econometrics	27	25	25	27	26	26	24	25	24	26
Economics	784	834	796	825	872	836	861	885	906	914
Political science	666	659	647	634	700	734	740	804	824	930
International relations & affairs [24]	78	76	82	77	94	97	88	76	102	114
Political science/government	406	414	404	392	430	462	434	513	507	589
Public administration	112	88	78	92	97	88	107	108	117	134
Public policy analysis [25]	70	81	83	73	79	87	111	107	98	93
Sociology	486	506	449	468	458	448	493	512	535	547
Demography/population studies [26]	25	15	26	19	22	20	26	17	22	23
Sociology	461	491	423	449	436	428	465	495	513	524
Other social sciences	1,106	1,140	1,108	1,126	1,104	1,143	1,270	1,243	1,343	1,321
American studies	87	68	75	70	76	72	92	81	101	88
Anthropology	353	381	352	325	325	324	341	320	342	384
Archaeology	24	28	31	23	26	22	33	33	38	34
Area studies	19	28	17	16	17	22	24	33	36	34
Criminology	38	24	29	43	32	42	35	37	39	41
Geography	120	120	111	129	105	131	108	111	137	146
History/philosophy of science & technology [27]	23	24	25	22	20	26	27	28	37	26
Linguistics	176	189	199	166	188	167	227	266	214	221
Statistics	60	65	49	47	69	69	31	29	48	46
Urban affairs & studies [28]	75	50	72	86	62	67	90	86	123	132
Social sciences, general	17	36	30	28	26	23	36	33	32	21
Social sciences, other	114	127	118	171	158	178	226	186	196	148

See explanatory information, if any, and SOURCE at end of table.

Table 1. Science and engineering (S&E) doctorates awarded, by field of study and year of doctorate: 1985-94

Field of study	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Non-S&E, total [29]	12,362	12,462	12,473	12,566	12,593	13,200	13,499	14,177	14,311	14,800
Health	729	770	800	882	974	956	1,042	1,112	1,197	1,297
Humanities [30]	3,119	3,152	3,170	3,275	3,243	3,535	3,719	4,035	4,086	4,374
Education	6,733	6,646	6,450	6,359	6,278	6,511	6,442	6,640	6,650	6,683
Professional/other	1,781	1,894	2,053	2,050	2,098	2,198	2,296	2,390	2,378	2,446
Grand total, all fields	31,298	31,899	32,367	33,499	34,324	36,067	37,518	38,850	39,755	41,011

1 In 1993 this subfield was changed from "Polymer engineering" to "Polymer and plastics engineering."

2 In 1993 this subfield was changed from "Industrial engineering" to "Industrial and manufacturing engineering."

3 In 1993 this subfield was changed from "Ceramic engineering" to "Ceramic sciences engineering."

4 This subfield was deleted in 1991.

5 In 1993 this subfield was changed from "Pharmaceutical chemistry" to "Medicinal and pharmaceutical chemistry."

6 In 1993 this subfield was changed from "Atomic/molecular physics" to "Chemical and atomic/molecular physics."

7 In 1993 this subfield was changed from "Plasma physics" to "Plasma and high-temperature physics."

8 In 1993 this subfield was changed from "Solid state physics" to "Solid state and low-temperature physics."

9 In 1993 this subfield was changed from "Math probability and statistics" to "Mathematical statistics."

10 "Biotechnology research" was introduced in 1993.

11 In 1990 this subfield was changed from "Embryology" to "Developmental biology and embryology."

12 In 1993 this subfield was changed from "Immunology" to "Biological immunology."

13 In 1993 this subfield was changed from "Agronomy" to "Agronomy and crop science."

14 This subfield was introduced in 1988.

15 In 1993 this subfield was changed from "Fisheries science" to "Fisheries science and management."

16 In 1988 this subfield was changed from "Wildlife management" to "Wildlife and range management."

17 In 1988 "Food sciences" was separated into "Food distribution," "Food engineering," and "Food sciences, other."

18 In 1988 "Forestry science" was separated into "Forest biology," "Forest engineering," "Forest management," "Wood science," "Renewable natural resources," and "Foresty and related sciences, other." In 1993 "Pulp and paper technology" was added to "Wood science," and "Conservation" was added to "Renewable natural resources."

19 "Plant protection-pest management" was introduced in 1988 and deleted in 1991.

20 In 1988 "Soil sciences" was separated into "Soil chemistry and microbiology" and "Soil sciences, other."

21 In 1993 this subfield was changed from "Cognitive psychology" to "Cognitive psychology and psycholinguistics."

22 In 1993 this subfield was changed from "Developmental psychology" to "Developmental and child psychology."

23 In 1993 this subfield was changed from "Physiological psychology" to "Physiological psychology and psychobiology."

24 In 1993 this subfield was changed from "International relations" to "International relations and affairs."

25 In 1993 this subfield was changed from "Public policy studies" to "Public policy analysis."

26 In 1993 this subfield was changed from "Demography" to "Demography and population studies."

27 In 1993 this subfield was changed from "History of science" to "History and philosophy of science and technology."

28 In 1993 this subfield was changed from "Urban studies" to "Urban affairs and studies."

29 Non-S&E doctorates include those whose field of specialization is unknown.

30 Categories differ from those published by other Federal sponsors and the National Research Council in that linguistics, history of science, American studies, and archaeology are included not in humanities but in social science.

KEY: N/A = Not available (i.e., the subfield was not identified separately in the questionnaire for that year)

SOURCE: National Science Foundation/SRS, Survey of Earned Doctorates

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Table 2. Science and engineering (S&E) doctorates awarded to women, by field of study and year of doctorate: 1985-94

Field of study	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	Percent women	
											1985	1994
S&E, total	4,891	5,167	5,312	5,662	6,109	6,369	6,931	7,080	7,653	7,923	25.8	30.2
Engineering, total	198	225	242	286	375	415	467	506	522	635	6.3	10.9
Aeronautical/astronautical engineering	5	1	10	9	8	4	7	8	8	11	4.0	4.8
Chemical engineering	41	61	60	65	80	78	83	113	94	113	8.1	15.6
Chemical	35	53	56	60	74	71	75	101	83	101	8.0	16.0
Petroleum	0	1	0	2	1	0	1	3	5	3	.0	7.1
Polymer/plastics[1]	6	7	4	3	5	7	7	9	6	9	15.0	17.0
Civil engineering	20	21	18	30	54	49	41	50	54	80	5.1	11.7
Civil	18	19	17	25	45	39	31	36	45	56	5.0	9.3
Environmental health	2	2	1	5	9	10	10	14	9	24	6.1	29.3
Electrical engineering	35	38	32	48	67	84	79	115	125	147	4.9	8.8
Communications	2	0	0	3	1	2	2	1	2	5	6.7	15.2
Computer	5	5	2	7	12	11	9	13	15	25	9.1	12.4
Electrical/electronics	28	33	30	38	54	71	68	101	108	117	4.4	8.1
Industrial/manufacturing engineering[2]	6	14	13	19	18	25	17	25	27	33	6.5	14.5
Materials/metallurgical engineering	32	24	45	33	45	49	77	61	78	83	10.6	15.4
Ceramic sciences[3]	0	3	4	3	4	11	10	9	6	9	.0	23.1
Materials science	23	18	36	25	35	31	59	50	67	69	12.2	15.9
Metallurgical	9	3	5	5	6	7	8	2	5	5	9.4	7.5
Mechanical engineering	26	18	17	29	29	38	57	45	57	69	5.1	6.8
Mechanical	22	14	14	26	22	29	50	33	46	60	5.2	6.8
Engineering mechanics	4	4	3	3	7	9	7	12	11	9	4.5	6.8
Other engineering	33	48	47	53	74	88	106	89	79	99	6.3	13.6
Agricultural	3	1	3	3	6	7	8	6	6	10	5.0	11.2
Bioengineering/biomedical	11	9	15	18	26	23	27	33	31	45	15.9	25.7
Engineering physics	1	0	1	0	0	1	2	2	3	3	8.3	17.6
Engineering science	0	3	0	3	3	6	3	6	3	3	.0	6.5
Mining/mineral	0	2	1	1	4	2	6	3	1	3	.0	13.0
Naval architecture/marine[4]	0	0	0	0	1	1	0	N/A	N/A	N/A	.0	-
Nuclear	3	6	2	4	7	9	6	9	5	8	3.1	9.4
Ocean	0	0	1	0	2	2	1	0	1	2	.0	6.9
Operations research	8	11	7	4	14	6	22	11	10	7	14.8	14.9
Systems	4	2	3	7	3	3	4	3	4	5	7.0	9.8
Engineering, general	0	5	8	2	2	10	7	3	3	4	.0	10.3
Engineering, other	3	9	6	11	6	18	20	13	12	9	4.3	7.0
Sciences, total	4,693	4,942	5,070	5,376	5,734	5,954	6,464	6,574	7,131	7,288	29.8	35.8
Physical sciences, total	467	510	528	567	619	661	679	770	780	827	15.9	20.8
Astronomy	11	9	13	16	17	20	14	19	25	25	11.0	17.5
Astronomy	5	4	7	13	8	13	7	11	12	9	11.6	13.8
Astrophysics	6	5	6	3	9	7	7	8	13	16	10.5	20.5
Chemistry	362	396	406	427	499	503	517	579	582	624	19.7	27.7
Analytical	62	46	72	60	63	68	83	95	91	101	21.8	30.3
Inorganic	47	62	59	66	74	60	73	69	59	87	18.7	33.2
Medicinal/pharmaceutical[5]	15	17	16	19	21	20	27	27	38	26	25.0	25.5
Nuclear	1	2	0	0	0	2	4	1	0	0	14.3	.0
Organic	79	96	88	89	105	104	108	119	131	128	16.0	23.6
Physical	70	71	59	71	87	76	86	109	88	93	23.0	27.9
Polymer	14	12	13	12	15	13	24	12	22	23	16.7	19.7
Theoretical	7	6	17	9	9	14	7	16	16	17	14.6	32.7
Chemistry, general	45	52	53	73	91	128	76	107	112	126	21.1	28.2
Chemistry, other	22	32	29	28	34	18	29	24	25	23	24.4	41.8

See explanatory information, if any, and SOURCE at end of table.

Table 2. Science and engineering (S&E) doctorates awarded to women, by field of study and year of doctorate: 1985-94

Field of study	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	Percent women	
											1985	1994
Physics	91	100	107	114	101	120	142	167	169	175	9.3	11.3
Acoustics	3	2	0	2	0	2	2	0	1	2	30.0	10.0
Chemical & atomic/molecular[6]	6	6	4	8	8	7	4	6	14	17	10.3	12.1
Electron[4]	1	0	0	0	0	0	0	N/A	N/A	N/A	25.0	-
Elementary particle	8	11	15	16	10	14	20	12	18	16	5.2	9.1
Fluids	1	2	0	0	1	1	0	1	2	1	6.3	8.3
Nuclear	7	8	4	6	8	5	7	12	8	9	8.1	10.0
Optics	9	9	5	6	7	5	13	9	14	14	17.6	13.5
Plasma & high-temperature[7]	3	3	5	4	4	2	2	4	4	8	5.5	10.1
Polymer	3	3	3	0	1	3	3	1	5	4	27.3	13.8
Solid state & low-temperature[8]	19	29	24	35	23	35	42	53	42	53	7.7	13.7
Physics, general	10	18	31	25	19	33	31	42	46	30	5.7	8.7
Physics, other	21	9	16	12	20	23	18	27	15	21	18.9	12.5
Other physical sciences	3	5	2	10	2	8	6	5	4	3	16.7	10.3
Earth, atmospheric, and ocean sciences, total	108	95	112	135	148	141	179	188	160	183	18.0	22.2
Atmospheric sciences	4	8	14	11	10	14	16	27	18	26	5.0	20.2
Atmospheric dynamics	1	2	3	2	2	4	3	4	5	9	4.8	33.3
Atmospheric physics/chemistry	1	3	4	0	2	1	2	5	2	5	6.3	18.5
Meteorology	2	2	0	7	0	3	7	10	3	8	8.7	25.0
Atmospheric science/meteorology, general	0	0	4	1	3	5	3	7	7	4	.0	10.8
Atmospheric science/meteorology, other	0	1	3	1	3	1	1	1	1	0	.0	.0
Geosciences	75	68	76	82	92	85	124	115	89	95	19.5	18.7
Applied geology[4]	0	1	1	1	0	3	0	N/A	N/A	N/A	0	-
Geology	21	23	25	36	35	32	34	35	35	32	18.9	16.5
Geochemistry	11	7	9	7	13	9	19	16	13	10	22.9	16.9
Geomorphology/glacial geology	1	2	2	3	3	1	2	5	3	2	7.7	15.4
Geophysics/seismology	13	18	11	8	11	15	20	23	14	24	14.1	22.6
Hydrology/water resources	1	1	5	5	2	1	2	7	9	3	5.9	10.0
Mineralogy/petrology	10	4	8	3	5	4	15	6	1	6	35.7	28.6
Paleontology	5	7	5	3	4	2	7	2	5	2	21.7	11.8
Stratigraphy/sedimentation	5	0	2	8	6	5	8	10	5	4	21.7	14.8
Geological & related sciences, general	5	1	3	2	2	5	9	4	2	1	45.5	5.6
Geological & related sciences, other	3	4	5	6	11	8	8	7	2	11	27.3	45.8
Oceanography	23	11	16	26	26	31	26	29	35	38	25.0	30.4
Marine sciences	2	3	3	9	6	7	2	11	8	11	8.3	32.4
Oceanography	21	8	13	17	20	24	24	18	27	27	30.9	29.7
Other environmental sciences	6	8	6	16	20	11	13	17	18	24	14.3	39.3
Mathematical/computer sciences, total	139	169	190	177	263	268	316	325	402	373	13.9	18.4
Mathematics, total	106	121	125	121	155	158	199	205	264	236	15.4	21.1
Algebra	6	18	10	10	10	6	16	13	28	23	10.9	31.1
Analysis/functional analysis	10	11	6	15	20	15	21	18	23	16	12.0	15.2
Applied mathematics	19	20	29	17	28	34	27	44	43	39	16.4	19.1
Computing theory	1	0	4	3	1	1	3	0	3	2	6.7	12.5
Geometry	2	1	3	4	7	8	5	6	7	4	5.7	11.8
Logic	4	3	2	2	5	3	1	2	4	6	13.3	20.7
Mathematical statistics[9]	32	27	36	31	38	31	56	46	57	50	21.3	24.5
Number theory	2	1	2	5	5	1	8	4	4	5	11.1	13.9
Operations research	6	4	1	3	4	2	4	6	9	9	27.3	34.6
Topology	4	6	3	3	6	11	18	16	9	10	11.4	28.6
Mathematics, general	12	20	22	20	17	32	31	37	56	56	14.1	19.7
Mathematics, other	8	10	7	8	12	14	9	13	21	16	18.2	22.5
Computer sciences, total	33	48	65	56	108	110	117	120	138	137	10.6	15.2
Computer science	20	39	51	39	69	85	96	91	123	118	8.0	14.1
Information science/systems	13	9	14	17	39	25	21	29	15	19	21.3	27.1

See explanatory information, if any, and SOURCE at end of table.

Table 2. Science and engineering (S&E) doctorates awarded to women, by field of study and year of doctorate: 1985-94

Field of study	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	Percent women	
											1985	1994
Biological/agricultural sciences, total	1,409	1,452	1,531	1,691	1,769	1,860	1,981	2,064	2,278	2,354	28.7	37.5
Biological sciences, total	1,238	1,280	1,360	1,505	1,542	1,614	1,772	1,831	2,050	2,105	32.6	40.5
Bacteriology	4	2	6	2	2	4	5	5	6	11	23.5	61.1
Biochemistry	184	194	199	203	268	237	289	284	318	321	31.7	39.9
Biophysics	7	13	22	21	21	23	26	33	21	33	10.1	26.8
Biotechnology research [10]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	4	2	-	14.3
Plant genetics	8	10	7	6	3	7	5	8	12	5	25.8	16.7
Plant pathology	8	5	10	9	8	12	13	10	15	11	21.1	27.5
Plant physiology	12	18	15	23	15	19	19	16	19	21	20.7	30.0
Botany, other	34	42	36	41	52	33	39	45	43	46	28.3	39.3
Anatomy	45	27	42	32	27	29	31	31	34	29	33.3	43.9
Biometrics/biostatistics	12	10	14	15	20	18	29	24	21	33	30.0	46.5
Cell biology	39	44	55	55	57	69	63	80	116	101	39.0	42.8
Developmental biology/ embryology [11]	5	7	0	3	4	12	20	22	25	32	33.3	51.6
Ecology	52	40	38	47	36	52	60	65	66	70	26.0	34.8
Endocrinology	4	6	11	10	10	11	16	12	12	8	23.5	30.8
Entomology	34	22	25	26	23	26	35	35	28	28	19.7	22.8
Biological immunology [12]	54	51	53	91	61	72	76	83	73	74	43.5	46.0
Microbiology	113	118	103	120	124	116	150	157	183	177	39.1	41.8
Molecular biology	95	115	116	130	153	152	182	194	237	267	34.3	44.7
Neuroscience	58	39	48	60	63	76	88	92	110	129	37.2	45.4
Nutritional sciences	72	86	97	89	91	88	70	95	99	102	63.7	69.4
Parasitology	2	3	5	8	5	4	7	8	7	9	9.5	40.9
Toxicology	24	33	34	30	39	36	30	33	43	49	24.2	41.2
Human/animal genetics	49	41	54	57	57	73	71	61	76	87	46.7	42.9
Human/animal pathology	35	33	48	43	41	32	46	41	45	46	31.8	35.7
Human/animal pharmacology	76	81	86	92	99	91	90	92	121	104	32.3	40.6
Human/animal physiology	70	77	76	89	105	98	107	82	100	106	28.6	36.9
Zoology, other	46	44	44	43	35	37	39	45	32	32	31.3	27.4
Biological sciences, general	62	73	81	97	77	140	113	115	114	117	32.6	40.5
Biological sciences, other	34	46	35	63	46	47	53	63	70	55	38.6	34.2
Agricultural sciences, total	171	172	171	186	227	246	209	233	228	249	15.4	23.1
Agronomy & crop science [13]	19	15	17	19	20	21	11	23	19	17	12.0	11.9
Animal breeding/genetics	8	4	3	2	3	3	2	6	4	3	28.6	17.6
Animal nutrition	13	13	13	12	15	13	10	8	7	10	16.7	17.2
Dairy science [14]	N/A	N/A	N/A	1	1	2	4	2	2	1	-	9.1
Poultry science [14]	N/A	N/A	N/A	2	2	3	1	6	6	5	-	23.8
Animal sciences, other	13	16	16	13	25	11	20	21	19	25	13.7	29.1
Fisheries science & management [15]	5	9	0	8	5	6	4	1	4	11	13.9	22.9
Wildlife/range management [16]	1	2	1	8	10	6	8	7	17	13	2.6	25.0
Food science [17]	33	40	48	3	0	N/A	N/A	N/A	N/A	N/A	24.3	-
Food engineering [17]	N/A	N/A	N/A	1	1	2	2	2	2	2	-	12.5
Food sciences, other [17]	N/A	N/A	N/A	36	53	54	46	60	57	69	-	45.1
Forestry science [18]	15	17	5	2	N/A	N/A	N/A	N/A	N/A	N/A	14.3	-
Forest biology [18]	N/A	N/A	N/A	3	3	8	3	8	7	6	-	30.0
Forest engineering [18]	N/A	N/A	N/A	0	0	0	1	0	0	0	-	.0
Forest management [18]	N/A	N/A	N/A	2	2	1	4	1	0	2	-	11.8
Wood science & pulp/paper technology [18]	N/A	N/A	N/A	0	0	0	2	2	3	6	-	23.1
Conservation/renewable natural resources [18]	N/A	N/A	N/A	0	1	3	3	1	4	6	-	28.6
Forestry & related sciences, other [18]	N/A	N/A	N/A	6	8	10	5	9	9	6	-	10.2
Horticulture science	11	12	16	16	19	27	19	16	15	14	14.5	21.5
Plant breeding/genetics	14	13	11	12	13	20	10	12	14	13	15.9	16.0
Plant pathology	24	14	22	12	24	25	26	20	15	20	27.0	36.4
Plant protection-pest management [19]	N/A	N/A	N/A	0	0	1	0	0	0	0	-	.0
Plant sciences, other	3	5	3	3	4	4	4	6	9	9	14.3	37.5
Soil sciences [20]	7	10	7	1	N/A	N/A	N/A	N/A	N/A	N/A	7.2	-
Soil chemistry/ microbiology [20]	N/A	N/A	N/A	7	7	6	6	3	5	4	-	19.0
Soil sciences, other [20]	N/A	N/A	N/A	11	7	8	11	12	4	6	-	8.7
Agricultural sciences, general	0	0	0	3	2	0	1	2	2	0	.0	.0
Agricultural sciences, other	5	2	9	3	2	12	6	5	4	1	8.2	9.1

See explanatory information, if any, and SOURCE at end of table.

Table 2. Science and engineering (S&E) doctorates awarded to women, by field of study and year of doctorate: 1985-94

Field of study	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	Percent women	
											1985	1994
Psychology, total	1,541	1,599	1,698	1,681	1,800	1,913	1,996	1,928	2,089	2,108	49.4	62.2
Clinical	591	603	667	612	710	785	848	810	873	846	50.0	65.6
Cognitive psychology & psycholinguistics [21]	23	33	41	34	33	35	46	47	48	56	30.3	43.4
Comparative	2	6	6	4	1	3	5	2	3	7	18.2	87.5
Counseling	215	237	254	261	284	281	306	289	284	309	49.9	62.3
Developmental & child [22]	112	117	139	131	116	112	119	131	155	134	64.0	74.0
Educational	78	58	50	65	60	69	64	69	67	39	61.4	56.5
Experimental	65	64	54	61	70	49	64	73	68	72	39.4	51.4
Industrial/organizational	29	52	49	54	49	53	76	64	73	69	28.4	50.4
Physiological/ psychobiology [23]	35	30	32	45	33	28	21	25	50	52	44.3	55.9
Quantitative	4	8	7	5	6	3	2	5	11	8	25.0	47.1
Personality	9	9	11	8	17	10	4	8	12	12	42.9	63.2
Psychometrics	3	7	3	6	3	4	3	2	2	1	30.0	20.0
School	54	59	53	66	69	53	57	59	65	53	58.7	63.1
Social	94	79	72	75	68	92	86	78	68	100	56.3	65.4
Psychology, general	125	149	173	196	204	233	185	168	185	159	47.0	56.0
Psychology, other	102	88	87	58	77	103	110	98	125	191	51.3	67.0
Social sciences, total	1,029	1,117	1,011	1,125	1,135	1,111	1,313	1,299	1,422	1,443	32.0	37.0
Economics	145	181	163	198	198	200	217	219	246	250	15.1	22.7
Agricultural economics	21	16	24	31	25	27	38	28	31	20	14.2	12.3
Econometrics	2	2	4	4	2	3	5	2	7	4	7.4	15.4
Economics	122	163	135	163	171	170	174	189	208	226	15.6	24.7
Political science	175	196	175	164	201	170	211	235	246	282	26.3	30.3
International relations & affairs [24]	16	15	15	14	29	15	24	24	28	24	20.5	21.1
Political science/government	107	117	111	96	107	108	117	142	129	173	26.4	29.4
Public administration	28	30	19	29	37	22	32	30	41	47	25.0	35.1
Public policy analysis [25]	24	34	30	25	28	25	38	39	48	38	34.3	40.9
Sociology	243	221	175	249	232	218	246	250	255	282	50.0	51.6
Demography/population studies [26]	9	6	7	11	10	11	16	5	12	12	36.0	52.2
Sociology	234	215	168	238	222	207	230	245	243	270	50.8	51.5
Other social sciences	466	519	498	514	504	523	639	595	675	629	42.1	47.6
American studies	42	38	39	43	48	37	56	47	57	48	48.3	54.5
Anthropology	181	197	181	170	148	173	210	155	213	208	51.3	54.2
Archaeology	9	14	17	8	14	12	20	17	18	17	37.5	50.0
Area studies	5	6	5	5	5	9	5	11	11	17	26.3	50.0
Criminology	10	7	7	15	10	16	18	15	15	12	26.3	29.3
Geography	29	39	26	33	25	35	33	29	40	35	24.2	24.0
History/philosophy of science & technology [27]	2	10	10	10	9	9	11	8	16	10	8.7	38.5
Linguistics	91	96	106	83	106	90	112	133	118	134	51.7	60.6
Statistics	14	17	13	9	20	12	10	11	14	16	23.3	34.8
Urban affairs & studies [28]	21	16	22	31	23	21	22	31	44	43	28.0	32.6
Social sciences, general	8	13	6	13	9	9	17	20	13	9	47.1	42.9
Social sciences, other	54	66	66	94	87	100	125	118	116	80	47.4	54.1

See explanatory information, if any, and SOURCE at end of table.

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Table 2. Science and engineering (S&E) doctorates awarded to women, by field of study and year of doctorate: 1985-94

Field of study	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	Percent women	
											1985	1994
Non-S&E, total[29]	5,853	6,138	6,116	6,156	6,403	6,736	6,939	7,338	7,453	7,883	47.3	53.3
Health	440	480	475	549	629	592	669	710	777	844	60.4	65.1
Humanities[30]	1,345	1,406	1,399	1,431	1,436	1,600	1,721	1,858	1,917	2,055	43.1	47.0
Education	3,491	3,611	3,553	3,513	3,609	3,752	3,744	3,958	3,905	4,073	51.8	60.9
Professional/other	577	641	689	663	729	792	805	812	854	911	32.4	37.2
Grand total, all fields	10,744	11,305	11,428	11,818	12,512	13,105	13,870	14,418	15,106	15,806	34.3	38.5

1 In 1993 this subfield was changed from "Polymer engineering" to "Polymer and plastics engineering."

2 In 1993 this subfield was changed from "Industrial engineering" to "Industrial and manufacturing engineering."

3 In 1993 this subfield was changed from "Ceramic engineering" to "Ceramic sciences engineering."

4 This subfield was deleted in 1991.

5 In 1993 this subfield was changed from "Pharmaceutical chemistry" to "Medicinal and pharmaceutical chemistry."

6 In 1993 this subfield was changed from "Atomic/molecular physics" to "Chemical and atomic/molecular physics."

7 In 1993 this subfield was changed from "Plasma physics" to "Plasma and high-temperature physics."

8 In 1993 this subfield was changed from "Solid state physics" to "Solid state and low-temperature physics."

9 In 1993 this subfield was changed from "Math probability and statistics" to "Mathematical statistics."

10 "Biotechnology research" was introduced in 1993.

11 In 1990 this subfield was changed from "Embryology" to "Developmental biology and embryology."

12 In 1993 this subfield was changed from "Immunology" to "Biological immunology."

13 In 1993 this subfield was changed from "Agronomy" to "Agronomy and crop science."

14 This subfield was introduced in 1988.

15 In 1993 this subfield was changed from "Fisheries science" to "Fisheries science and management."

16 In 1988 this subfield was changed from "Wildlife management" to "Wildlife and range management."

17 In 1988 "Food sciences" was separated into "Food distribution," "Food engineering," and "Food sciences, other."

18 In 1988 "Forestry science" was separated into "Forest biology," "Forest engineering," "Forest management," "Wood science," "Renewable natural resources," and "Foresty and related sciences, other." In 1993 "Pulp and paper technology" was added to "Wood science," and "Conservation" was added to "Renewable natural resources."

19 "Plant protection-pest management" was introduced in 1988 and deleted in 1991.

20 In 1988 "Soil sciences" was separated into "Soil chemistry and microbiology" and "Soil sciences, other."

21 In 1993 this subfield was changed from "Cognitive psychology" to "Cognitive psychology and psycholinguistics."

22 In 1993 this subfield was changed from "Developmental psychology" to "Developmental and child psychology."

23 In 1993 this subfield was changed from "Physiological psychology" to "Physiological psychology and psychobiology."

24 In 1993 this subfield was changed from "International relations" to "International relations and affairs."

25 In 1993 this subfield was changed from "Public policy studies" to "Public policy analysis."

26 In 1993 this subfield was changed from "Demography" to "Demography and population studies."

27 In 1993 this subfield was changed from "History of science" to "History and philosophy of science and technology."

28 In 1993 this subfield was changed from "Urban studies" to "Urban affairs and studies."

29 Non-S&E doctorates include those whose field of specialization is unknown.

30 Categories differ from those published by other Federal sponsors and the National Research Council in that linguistics, history of science, American studies, and archaeology are included not in humanities but in social science.

KEY: N/A = Not available (i.e., the subfield was not identified separately in the questionnaire for that year)
- = Percent not available as data were not collected that year.

SOURCE: National Science Foundation/SRS, Survey of Earned Doctorates

Table 3. Science and engineering (S&E) doctorates awarded, by citizenship status, sex, racial/ethnic group, and major field of study of recipients: 1985-94

Field of study	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
	U.S. citizens and permanent residents									
Science and engineering, total	14,065	14,016	14,055	14,499	14,591	15,363	15,908	15,940	16,569	18,171
Engineering, total	1,594	1,726	1,913	2,146	2,229	2,346	2,474	2,520	2,696	3,050
Chemical	292	298	350	408	444	392	399	378	377	380
Civil	170	192	203	233	247	241	213	215	227	292
Electrical	353	410	393	503	539	599	686	719	794	899
Mechanical	251	267	308	327	325	368	359	426	434	535
Other engineering	528	559	659	675	674	746	817	782	864	944
Sciences, total	12,471	12,290	12,142	12,353	12,362	13,017	13,434	13,420	13,873	15,121
Physical sciences, total	2,187	2,166	2,242	2,258	2,131	2,341	2,299	2,356	2,330	2,785
Astronomy	84	91	73	104	82	96	86	106	111	111
Chemistry	1,432	1,413	1,472	1,451	1,383	1,497	1,460	1,440	1,400	1,613
Physics	662	643	682	681	654	725	739	790	806	1,044
Other physical sciences	9	19	15	22	12	23	14	20	13	17
Earth, atmospheric, and ocean sciences	465	427	435	520	547	535	618	541	503	612
Mathematics	418	402	396	386	428	422	518	507	590	647
Computer sciences	213	249	275	326	396	403	451	489	509	543
Biological sciences	3,256	3,241	3,141	3,323	3,299	3,379	3,521	3,567	3,750	4,083
Agricultural sciences	726	626	632	610	651	687	620	573	506	616
Psychology	2,864	2,832	2,806	2,729	2,737	2,992	3,018	2,986	3,161	3,145
Social sciences	2,342	2,347	2,215	2,201	2,173	2,258	2,389	2,401	2,524	2,690
Non-S&E, total	10,629	10,500	10,506	10,413	10,435	11,240	11,508	12,012	12,093	12,675
Health	585	603	646	692	756	756	840	855	939	1,050
Humanities[1]	2,768	2,665	2,672	2,760	2,717	3,082	3,194	3,439	3,511	3,761
Education	5,906	5,799	5,663	5,475	5,409	5,788	5,779	5,982	5,930	6,040
Professional/other	1,370	1,433	1,525	1,486	1,553	1,614	1,695	1,736	1,713	1,824
Grand total, all fields	24,694	24,516	24,561	24,912	25,026	26,603	27,416	27,952	28,662	30,846
	U.S. citizens and permanent residents, American Indian/Alaskan Native									
Science and engineering, total	41	52	53	44	53	42	56	69	43	64
Engineering, total	1	6	7	4	7	4	6	11	2	6
Chemical	0	0	1	2	1	0	1	1	1	1
Civil	0	0	1	1	1	2	1	1	0	0
Electrical	1	2	3	0	0	0	2	4	0	1
Mechanical	0	2	1	1	0	0	1	1	0	0
Other engineering	0	2	1	0	5	2	1	4	1	4
Sciences, total	40	46	46	40	46	38	50	58	41	58
Physical sciences, total	3	5	7	6	10	3	10	12	5	6
Astronomy	0	0	0	0	2	0	0	0	1	0
Chemistry	2	5	6	5	5	3	9	6	2	4
Physics	1	0	1	1	3	0	1	6	2	2
Other physical sciences	0	0	0	0	0	0	0	0	0	0
Earth, atmospheric, and ocean sciences	1	2	0	2	6	1	3	1	4	1
Mathematics	0	1	0	2	0	1	0	2	1	2
Computer sciences	0	0	3	1	2	0	1	2	1	1
Biological sciences	13	17	11	6	7	4	10	13	7	16
Agricultural sciences	4	0	2	6	2	4	4	0	1	1
Psychology	19	9	16	7	11	18	13	15	15	12
Social sciences	9	12	7	10	8	7	9	13	7	19
Non-S&E, total	55	47	62	50	41	54	76	80	77	78
Health	2	6	3	5	3	1	5	5	6	6
Humanities[1]	7	6	10	4	7	6	10	18	10	20
Education	40	26	41	36	25	37	56	50	51	36
Professional/other	6	9	8	5	6	10	5	7	10	16
Grand total, all fields	96	99	115	94	94	96	132	149	120	142

See explanatory information, if any, and SOURCE at end of table.

Table 3. Science and engineering (S&E) doctorates awarded, by citizenship status, sex, racial/ethnic group, and major field of study of recipients: 1985-94

Field of study	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
	U.S. citizens and permanent residents, Asian									
Science and engineering, total	809	813	924	916	981	1,008	1,179	1,336	1,610	2,987
Engineering, total	281	262	327	332	360	359	405	450	527	868
Chemical	60	58	60	67	77	51	50	54	62	96
Civil	26	26	34	27	35	28	30	34	41	69
Electrical	63	71	78	103	93	115	140	175	199	305
Mechanical	58	31	61	57	66	69	62	78	93	179
Other engineering	74	76	94	78	89	96	123	109	132	219
Sciences, total	528	551	597	584	621	649	774	886	1,083	2,119
Physical sciences, total	152	146	143	138	156	164	171	225	265	598
Astronomy	2	6	1	5	2	5	0	4	4	10
Chemistry	112	109	108	85	96	99	121	133	157	330
Physics	36	31	34	47	57	58	50	88	103	255
Other physical sciences	2	0	0	1	1	2	0	0	1	3
Earth, atmospheric, and ocean sciences	19	14	18	14	22	15	17	27	22	89
Mathematics	33	28	41	33	24	27	57	51	79	141
Computer sciences	17	37	26	44	52	48	66	86	77	117
Biological sciences	151	167	170	171	199	200	261	268	370	720
Agricultural sciences	24	22	38	30	23	32	24	37	29	72
Psychology	44	41	47	47	55	53	59	56	73	109
Social sciences	88	96	114	107	90	110	119	136	168	273
Non-S&E, total	260	245	243	319	280	297	349	415	400	553
Health	34	30	35	30	22	39	44	52	45	94
Humanities[1]	56	42	52	64	77	62	79	99	107	149
Education	98	95	95	130	102	104	130	141	141	172
Professional/other	72	78	61	95	79	92	96	123	107	138
Grand total, all fields	1,069	1,058	1,167	1,235	1,261	1,305	1,528	1,751	2,010	3,540
	U.S. citizens and permanent residents, black									
Science and engineering, total	374	334	319	358	366	372	457	403	469	496
Engineering, total	34	24	25	31	33	40	55	49	51	54
Chemical	6	4	4	7	5	10	8	13	6	8
Civil	4	4	4	1	5	1	12	3	5	8
Electrical	8	4	3	7	9	8	16	17	15	17
Mechanical	3	3	3	1	5	5	3	5	4	7
Other engineering	13	9	11	15	9	16	16	11	21	14
Sciences, total	340	310	294	327	333	332	402	354	418	442
Physical sciences, total	27	26	20	33	31	30	31	25	41	46
Astronomy	0	0	2	0	0	1	0	1	2	0
Chemistry	23	17	13	21	26	24	22	17	31	34
Physics	4	8	5	12	5	5	9	6	7	11
Other physical sciences	0	1	0	0	0	0	0	1	1	1
Earth, atmospheric, and ocean sciences	4	0	2	3	4	3	3	6	4	6
Mathematics	7	6	11	4	8	4	11	4	8	11
Computer sciences	3	1	2	2	1	1	8	5	6	10
Biological sciences	53	48	60	48	56	50	60	61	74	75
Agricultural sciences	16	16	13	20	14	15	17	13	16	22
Psychology	105	109	93	103	97	115	129	103	119	124
Social sciences	125	104	93	114	122	114	143	137	150	148
Non-S&E, total	669	615	588	608	596	675	701	702	808	774
Health	23	21	31	32	29	32	40	38	59	46
Humanities[1]	71	67	73	76	71	72	92	89	98	106
Education	505	463	415	416	432	495	471	498	554	517
Professional/other	70	64	69	84	64	76	98	77	97	105
Grand total, all fields	1,043	949	907	966	962	1,047	1,158	1,105	1,277	1,270

See explanatory information, if any, and SOURCE at end of table.

Table 3. Science and engineering (S&E) doctorates awarded, by citizenship status, sex, racial/ethnic group, and major field of study of recipients: 1985-94

Field of study	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
	U.S. citizens and permanent residents, Hispanic									
Science and engineering, total	296	345	357	397	382	468	492	513	542	547
Engineering, total	22	35	34	63	47	54	60	71	66	66
Chemical	2	4	11	5	9	8	11	16	10	7
Civil	7	7	1	13	8	9	5	7	12	14
Electrical	4	9	6	14	14	13	15	17	17	21
Mechanical	3	6	5	7	3	5	9	11	5	8
Other engineering	6	9	11	24	13	19	20	20	22	16
Sciences, total	274	310	323	334	335	414	432	442	476	481
Physical sciences, total	30	41	56	63	59	72	65	72	79	90
Astronomy	0	2	0	2	2	2	1	4	2	2
Chemistry	17	25	44	48	43	57	46	42	51	59
Physics	13	13	12	13	14	13	18	26	26	29
Other physical sciences	0	1	0	0	0	0	0	0	0	0
Earth, atmospheric, and ocean sciences	6	4	5	7	9	13	16	16	13	8
Mathematics	12	12	11	4	11	10	9	12	16	13
Computer sciences	6	7	4	2	4	5	12	8	7	7
Biological sciences	59	66	62	76	71	89	95	102	114	130
Agricultural sciences	12	17	15	21	18	23	15	18	20	25
Psychology	69	90	95	93	93	109	122	133	131	133
Social sciences	80	73	75	68	70	93	98	81	96	75
Non-S&E, total	338	334	351	296	311	369	375	395	427	479
Health	14	12	11	13	11	17	16	13	24	25
Humanities[1]	107	91	114	102	100	127	136	128	145	167
Education	190	204	201	158	170	190	189	214	218	239
Professional/other	27	27	25	23	30	35	34	40	40	48
Grand total, all fields	634	679	708	693	693	837	867	908	969	1,026
	U.S. citizens and permanent residents, Puerto Rican									
Science and engineering, total	56	74	86	96	93	115	99	120	112	131
Engineering, total	5	11	4	13	7	6	9	13	10	10
Chemical	1	2	1	0	1	2	2	3	2	2
Civil	2	1	0	6	1	1	1	1	1	1
Electrical	0	4	2	2	1	2	0	3	5	3
Mechanical	0	0	0	1	3	0	2	1	1	1
Other engineering	2	4	1	4	1	1	4	5	1	3
Sciences, total	51	63	82	83	86	109	90	107	102	121
Physical sciences, total	8	9	26	23	20	24	17	20	17	26
Astronomy	0	0	0	0	1	1	0	1	0	0
Chemistry	7	5	26	19	16	20	14	14	14	19
Physics	1	4	0	4	3	3	3	5	3	7
Other physical sciences	0	0	0	0	0	0	0	0	0	0
Earth, atmospheric, and ocean sciences	0	1	0	0	0	5	0	3	1	0
Mathematics	0	3	6	1	4	2	0	2	1	1
Computer sciences	0	2	1	0	0	2	3	1	1	4
Biological sciences	10	12	18	20	18	24	23	27	27	28
Agricultural sciences	2	4	6	2	7	5	0	3	10	5
Psychology	12	17	15	26	21	26	20	35	24	43
Social sciences	19	15	10	11	16	21	27	16	21	14
Non-S&E, total	90	64	93	78	83	95	92	109	121	125
Health	4	4	3	4	4	6	3	4	3	6
Humanities[1]	17	11	29	23	22	28	30	22	36	38
Education	58	45	52	44	52	56	52	76	71	67
Professional/other	11	4	9	7	5	5	7	7	11	14
Grand total, all fields	146	138	179	174	176	210	191	229	233	256

See explanatory information, if any, and SOURCE at end of table.

Table 3. Science and engineering (S&E) doctorates awarded, by citizenship status, sex, racial/ethnic group, and major field of study of recipients: 1985-94

Field of study	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
	U.S. citizens and permanent residents, Mexican American									
Science and engineering, total	87	81	79	94	95	104	126	120	122	145
Engineering, total	6	5	8	11	14	13	14	10	12	15
Chemical	1	1	1	0	4	2	4	1	1	1
Civil	1	1	1	0	1	2	2	2	0	2
Electrical	3	1	1	2	3	4	3	3	2	4
Mechanical	0	2	1	1	0	3	3	2	0	2
Other engineering	1	0	4	8	6	2	2	2	9	6
Sciences, total	81	76	71	83	81	91	112	110	110	130
Physical sciences, total	8	12	9	12	11	11	15	9	12	24
Astronomy	0	0	0	1	0	0	0	0	0	1
Chemistry	5	10	4	10	10	11	12	6	8	19
Physics	3	2	5	1	1	0	3	3	4	4
Other physical sciences	0	0	0	0	0	0	0	0	0	0
Earth, atmospheric, and ocean sciences	3	0	2	4	2	3	4	7	2	4
Mathematics	5	3	0	0	2	3	3	4	4	4
Computer sciences	2	0	1	0	0	0	0	3	1	2
Biological sciences	11	9	10	14	12	22	26	24	24	30
Agricultural sciences	1	4	3	3	6	8	5	5	4	6
Psychology	25	29	27	28	31	25	35	37	42	40
Social sciences	26	19	19	22	17	19	24	21	21	20
Non-S&E, total	106	114	100	96	82	86	106	99	127	161
Health	4	3	3	3	5	7	3	5	8	5
Humanities[1]	22	23	17	21	22	19	27	24	35	42
Education	73	81	73	63	49	50	67	58	71	100
Professional/other	7	7	7	9	6	10	9	12	13	14
Grand total, all fields	193	195	179	190	177	190	232	219	249	306
	U.S. citizens and permanent residents, other Hispanic									
Science and engineering, total	153	190	192	207	194	249	267	273	308	271
Engineering, total	11	19	22	39	26	35	37	48	44	41
Chemical	0	1	9	5	4	4	5	12	7	4
Civil	4	5	0	7	6	6	2	4	11	11
Electrical	1	4	3	10	10	7	12	11	10	14
Mechanical	3	4	4	5	0	2	4	8	4	5
Other engineering	3	5	6	12	6	16	14	13	12	7
Sciences, total	142	171	170	168	168	214	230	225	264	230
Physical sciences, total	14	20	21	28	28	37	33	43	50	40
Astronomy	0	2	0	1	1	1	1	3	2	1
Chemistry	5	10	14	19	17	26	20	22	29	21
Physics	9	7	7	8	10	10	12	18	19	18
Other physical sciences	0	1	0	0	0	0	0	0	0	0
Earth, atmospheric, and ocean sciences	3	3	3	3	7	5	12	6	10	4
Mathematics	7	6	5	3	5	5	6	6	11	8
Computer sciences	4	5	2	2	4	3	9	4	5	1
Biological sciences	38	45	34	42	41	43	46	51	63	72
Agricultural sciences	9	9	6	16	5	10	10	10	6	14
Psychology	32	44	53	39	41	58	67	61	65	50
Social sciences	35	39	46	35	37	53	47	44	54	41
Non-S&E, total	142	156	158	122	146	188	177	187	179	193
Health	6	5	5	6	2	4	10	4	13	14
Humanities[1]	68	57	68	58	56	80	79	82	74	87
Education	59	78	76	51	69	84	70	80	76	72
Professional/other	9	16	9	7	19	20	18	21	16	20
Grand total, all fields	295	346	350	329	340	437	444	460	487	464

See explanatory information, if any, and SOURCE at end of table.

Table 3. Science and engineering (S&E) doctorates awarded, by citizenship status, sex, racial/ethnic group, and major field of study of recipients: 1985-94

Field of study	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
	U.S. citizens and permanent residents, white									
Science and engineering, total	12,166	12,148	12,051	12,454	12,500	13,167	13,320	13,321	13,733	13,880
Engineering, total	1,188	1,354	1,458	1,654	1,726	1,840	1,837	1,879	2,023	2,016
Chemical	211	227	266	317	345	318	322	284	295	259
Civil	130	152	158	183	191	196	159	166	168	199
Electrical	259	319	283	363	405	450	478	487	552	547
Mechanical	176	210	230	253	241	286	266	325	327	334
Other engineering	412	446	521	538	544	590	612	617	681	677
Sciences, total	10,978	10,794	10,593	10,800	10,774	11,327	11,483	11,442	11,710	11,864
Physical sciences, total	1,906	1,874	1,956	1,947	1,828	2,008	1,968	1,972	1,911	2,023
Astronomy	77	79	69	93	74	86	83	95	100	96
Chemistry	1,243	1,208	1,267	1,257	1,188	1,284	1,239	1,218	1,145	1,178
Physics	580	571	606	577	555	618	633	641	656	736
Other physical sciences	6	16	14	20	11	20	13	18	10	13
Earth, atmospheric, and ocean sciences	424	397	394	480	498	494	557	485	454	503
Mathematics	350	343	319	332	369	372	419	425	476	471
Computer sciences	177	193	229	265	319	339	355	378	410	401
Biological sciences	2,913	2,888	2,758	2,966	2,904	2,975	3,041	3,068	3,145	3,106
Agricultural sciences	659	557	554	518	570	601	545	493	438	487
Psychology	2,590	2,547	2,516	2,445	2,452	2,645	2,651	2,635	2,807	2,739
Social sciences	1,959	1,995	1,867	1,847	1,834	1,893	1,947	1,986	2,069	2,134
Non-S&E, total	9,131	9,077	9,065	9,003	9,068	9,708	9,855	10,268	10,287	10,686
Health	502	524	553	606	684	662	721	735	800	867
Humanities[1]	2,464	2,400	2,363	2,471	2,399	2,766	2,821	3,060	3,109	3,281
Education	4,991	4,917	4,815	4,666	4,633	4,900	4,881	5,021	4,937	5,028
Professional/other	1,174	1,236	1,334	1,260	1,352	1,380	1,432	1,452	1,441	1,510
Grand total, all fields	21,297	21,225	21,116	21,457	21,568	22,875	23,175	23,589	24,020	24,566
	U.S. citizens and permanent residents, male									
Science and engineering, total	9,881	9,649	9,631	9,888	9,670	10,182	10,313	10,363	10,546	11,676
Engineering, total	1,458	1,564	1,739	1,950	1,954	2,070	2,158	2,192	2,348	2,602
Chemical	261	256	298	355	375	330	339	296	313	302
Civil	159	177	192	218	207	207	188	192	195	237
Electrical	331	385	378	470	503	552	638	652	714	811
Mechanical	233	254	297	310	306	344	322	401	398	481
Other engineering	474	492	574	597	563	637	671	651	728	771
Sciences, total	8,423	8,085	7,892	7,938	7,716	8,112	8,155	8,171	8,198	9,074
Physical sciences, total	1,840	1,790	1,843	1,848	1,694	1,871	1,845	1,842	1,809	2,161
Astronomy	75	84	64	90	69	78	79	91	88	90
Chemistry	1,154	1,104	1,145	1,123	1,018	1,114	1,092	1,039	999	1,150
Physics	603	588	620	621	596	663	663	696	712	907
Other physical sciences	8	14	14	14	11	16	11	16	10	14
Earth, atmospheric, and ocean sciences	374	351	346	408	427	417	461	394	384	468
Mathematics	336	329	319	316	327	329	406	390	426	498
Computer sciences	189	206	221	280	312	313	357	406	400	449
Biological sciences	2,178	2,125	1,997	2,071	2,023	2,068	2,132	2,129	2,167	2,343
Agricultural sciences	600	503	506	482	487	528	483	423	372	456
Psychology	1,425	1,362	1,277	1,217	1,174	1,220	1,128	1,206	1,222	1,171
Social sciences	1,481	1,419	1,383	1,316	1,272	1,366	1,343	1,381	1,418	1,528
Non-S&E, total	5,341	5,056	5,061	5,001	4,865	5,174	5,288	5,428	5,413	5,668
Health	196	179	231	216	225	239	252	226	260	328
Humanities[1]	1,558	1,466	1,451	1,516	1,474	1,660	1,702	1,831	1,814	1,974
Education	2,712	2,525	2,453	2,336	2,221	2,359	2,341	2,329	2,356	2,301
Professional/other	875	886	926	933	945	916	993	1,042	983	1,065
Grand total, all fields	15,222	14,705	14,692	14,889	14,535	15,356	15,601	15,791	15,959	17,344

See explanatory information, if any, and SOURCE at end of table.

Table 3. Science and engineering (S&E) doctorates awarded, by citizenship status, sex, racial/ethnic group, and major field of study of recipients: 1985-94

Field of study	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
	U.S. citizens and permanent residents, male, American Indian/Alaskan Native									
Science and engineering, total	21	33	32	29	33	25	37	42	25	40
Engineering, total	1	5	7	4	5	4	4	8	2	4
Chemical	0	0	1	2	1	0	0	1	1	1
Civil	0	0	1	1	0	2	1	0	0	0
Electrical	1	2	3	0	0	0	1	3	0	1
Mechanical	0	2	1	1	0	0	1	1	0	0
Other engineering	0	1	1	0	4	2	1	3	1	2
Sciences, total	20	28	25	25	28	21	33	34	23	36
Physical sciences, total	3	3	5	5	10	3	8	10	3	5
Astronomy	0	0	0	0	2	0	0	0	1	0
Chemistry	2	3	4	5	5	3	7	4	1	4
Physics	1	0	1	0	3	0	1	6	1	1
Other physical sciences	0	0	0	0	0	0	0	0	0	0
Earth, atmospheric, and ocean sciences	1	1	0	1	4	0	2	1	4	1
Mathematics	0	0	0	2	0	1	0	1	1	2
Computer sciences	0	0	2	1	1	0	1	2	0	0
Biological sciences	4	11	7	4	4	3	6	8	5	11
Agricultural sciences	4	0	2	4	1	4	4	0	1	1
Psychology	5	4	4	3	3	6	5	6	6	5
Social sciences	3	9	5	5	5	4	7	6	3	11
Non-S&E, total	19	25	30	23	16	27	37	40	35	31
Health	1	0	1	1	0	1	3	3	0	1
Humanities[1]	2	5	6	0	2	4	3	12	7	12
Education	12	16	18	18	10	16	29	20	21	10
Professional/other	4	4	5	4	4	6	2	5	7	8
Grand total, all fields	40	58	62	52	49	52	74	82	60	71
	U.S. citizens and permanent residents, male, Asian									
Science and engineering, total	620	619	693	694	740	757	805	924	1,079	2,167
Engineering, total	260	247	305	314	326	326	356	389	466	749
Chemical	54	52	54	61	66	40	41	38	55	71
Civil	25	26	32	26	32	25	26	32	39	65
Electrical	59	67	75	97	85	109	135	154	174	274
Mechanical	57	31	61	57	65	66	59	74	90	155
Other engineering	65	71	83	73	78	86	95	91	108	184
Sciences, total	360	372	388	380	414	431	449	535	613	1,418
Physical sciences, total	111	105	107	96	120	122	123	146	168	420
Astronomy	2	4	1	4	0	3	0	2	2	9
Chemistry	79	74	77	57	73	70	85	78	85	201
Physics	28	27	29	34	46	47	38	66	80	208
Other physical sciences	2	0	0	1	1	2	0	0	1	2
Earth, atmospheric, and ocean sciences	18	13	15	10	18	14	11	19	14	72
Mathematics	27	23	30	22	21	20	39	33	43	115
Computer sciences	17	34	20	38	42	41	51	74	58	101
Biological sciences	94	100	93	98	110	113	132	136	198	451
Agricultural sciences	19	18	31	23	17	26	16	25	20	52
Psychology	23	18	16	20	28	22	15	19	22	32
Social sciences	51	61	76	73	58	73	62	83	90	175
Non-S&E, total	146	145	131	176	160	152	164	207	201	299
Health	20	18	18	18	13	17	21	22	22	48
Humanities[1]	33	16	22	31	42	28	37	48	41	83
Education	37	45	46	59	43	39	45	46	55	66
Professional/other	56	66	45	68	62	68	61	91	83	102
Grand total, all fields	766	764	824	870	900	909	969	1,131	1,280	2,466

See explanatory information, if any, and SOURCE at end of table.

Table 3. Science and engineering (S&E) doctorates awarded, by citizenship status, sex, racial/ethnic group, and major field of study of recipients: 1985-94

Field of study	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
	U.S. citizens and permanent residents, male, black									
Science and engineering, total	236	185	189	222	213	225	266	237	261	282
Engineering, total	30	20	24	27	30	34	47	43	40	41
Chemical	4	3	4	6	4	8	7	12	3	4
Civil	4	3	4	1	5	1	10	3	3	6
Electrical	8	4	3	5	9	7	14	15	13	14
Mechanical	3	2	3	1	5	5	2	5	4	6
Other engineering	11	8	10	14	7	13	14	8	17	11
Sciences, total	206	165	165	195	183	191	219	194	221	241
Physical sciences, total	20	22	17	25	24	23	26	19	31	33
Astronomy	0	0	2	0	0	1	0	0	2	0
Chemistry	17	14	11	14	19	17	17	12	22	25
Physics	3	7	4	11	5	5	9	6	7	7
Other physical sciences	0	1	0	0	0	0	0	1	0	1
Earth, atmospheric, and ocean sciences	4	0	1	3	3	1	2	5	4	5
Mathematics	7	3	9	4	5	3	7	4	7	8
Computer sciences	3	1	1	2	0	1	4	4	2	6
Biological sciences	32	26	35	25	32	29	29	37	42	32
Agricultural sciences	15	13	10	15	13	14	16	10	12	16
Psychology	42	42	34	46	36	43	44	28	44	46
Social sciences	83	58	58	75	70	77	91	87	79	93
Non-S&E, total	260	244	246	219	239	254	282	277	317	267
Health	11	6	12	8	9	14	17	14	16	11
Humanities[1]	37	32	34	40	35	37	44	46	56	51
Education	179	174	162	140	162	169	179	173	200	160
Professional/other	33	32	38	31	33	34	42	44	43	45
Grand total, all fields	496	429	435	441	452	479	548	514	578	549
	U.S. citizens and permanent residents, male, Hispanic									
Science and engineering, total	182	227	216	248	227	290	306	308	320	318
Engineering, total	22	32	29	57	39	45	50	56	54	60
Chemical	2	2	8	5	5	7	7	12	7	7
Civil	7	7	1	12	8	7	3	6	10	11
Electrical	4	8	6	12	13	12	15	14	14	21
Mechanical	3	6	5	6	2	4	7	9	5	7
Other engineering	6	9	9	22	11	15	18	15	18	14
Sciences, total	160	195	187	191	188	245	256	252	266	258
Physical sciences, total	23	32	39	47	41	46	54	52	59	69
Astronomy	0	1	0	2	2	2	1	3	2	2
Chemistry	12	19	29	35	26	33	37	26	33	43
Physics	11	11	10	10	13	11	16	23	24	24
Other physical sciences	0	1	0	0	0	0	0	0	0	0
Earth, atmospheric, and ocean sciences	5	3	4	3	6	9	14	10	11	6
Mathematics	7	9	9	4	7	6	5	9	14	10
Computer sciences	4	7	4	2	1	4	11	7	6	7
Biological sciences	36	39	38	49	50	56	56	59	57	69
Agricultural sciences	8	11	11	19	15	17	12	14	15	13
Psychology	28	47	32	38	30	52	52	55	45	43
Social sciences	49	47	50	29	38	55	52	46	59	41
Non-S&E, total	168	146	166	137	149	159	152	173	196	197
Health	6	5	3	7	4	2	7	4	8	7
Humanities[1]	59	45	62	47	51	52	64	65	72	78
Education	91	76	86	66	73	85	65	82	93	80
Professional/other	12	20	15	17	21	20	16	22	23	32
Grand total, all fields	350	373	382	385	376	449	458	481	516	515

See explanatory information, if any, and SOURCE at end of table.

Table 3. Science and engineering (S&E) doctorates awarded, by citizenship status, sex, racial/ethnic group, and major field of study of recipients: 1985-94

Field of study	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
	U.S. citizens and permanent residents, male, Puerto Rican									
Science and engineering, total	30	49	53	58	54	67	52	71	70	72
Engineering, total	5	9	3	11	6	4	7	10	8	10
Chemical	1	0	1	0	1	2	1	3	2	2
Civil	2	1	0	5	1	1	1	1	0	1
Electrical	0	4	2	2	1	1	0	2	4	3
Mechanical	0	0	0	1	2	0	2	0	1	1
Other engineering	2	4	0	3	1	0	3	4	1	3
Sciences, total	25	40	50	47	48	63	45	61	62	62
Physical sciences, total	4	8	17	16	16	14	11	14	12	19
Astronomy	0	0	0	0	1	1	0	1	0	0
Chemistry	4	4	17	13	12	10	9	9	9	13
Physics	0	4	0	3	3	3	2	4	3	6
Other physical sciences	0	0	0	0	0	0	0	0	0	0
Earth, atmospheric, and ocean sciences	0	1	0	0	0	4	0	3	1	0
Mathematics	0	2	4	1	1	2	0	1	1	1
Computer sciences	0	2	1	0	0	2	3	1	0	4
Biological sciences	6	9	11	10	14	14	12	16	16	14
Agricultural sciences	1	3	3	2	5	4	0	3	7	2
Psychology	4	8	8	12	5	11	6	16	13	13
Social sciences	10	7	6	6	7	12	13	7	12	9
Non-S&E, total	35	28	41	30	32	37	32	39	51	50
Health	1	2	0	2	1	0	2	3	0	2
Humanities[1]	6	4	18	9	10	8	11	10	18	16
Education	25	20	19	15	17	26	16	23	25	22
Professional/other	3	2	4	4	4	3	3	3	8	10
Grand total, all fields	65	77	94	88	86	104	84	110	121	122
	U.S. citizens and permanent residents, male, Mexican American									
Science and engineering, total	54	54	52	59	57	67	84	79	73	87
Engineering, total	6	5	7	11	9	11	12	10	10	13
Chemical	1	1	1	0	1	2	3	1	1	1
Civil	1	1	1	0	1	1	2	2	0	2
Electrical	3	1	1	2	2	4	3	3	2	4
Mechanical	0	2	1	1	0	2	2	2	0	2
Other engineering	1	0	3	8	5	2	2	2	7	4
Sciences, total	48	49	45	48	48	56	72	69	63	74
Physical sciences, total	7	9	8	11	9	8	12	7	9	20
Astronomy	0	0	0	1	0	0	0	0	0	1
Chemistry	4	8	4	9	8	8	10	4	6	16
Physics	3	1	4	1	1	0	2	3	3	3
Other physical sciences	0	0	0	0	0	0	0	0	0	0
Earth, atmospheric, and ocean sciences	3	0	2	2	2	2	4	5	2	4
Mathematics	3	2	0	0	2	1	1	4	3	3
Computer sciences	2	0	1	0	0	0	0	3	1	2
Biological sciences	6	3	6	12	9	15	19	11	13	17
Agricultural sciences	0	2	3	1	6	7	4	4	3	4
Psychology	10	20	11	9	10	11	20	19	16	17
Social sciences	17	13	14	13	10	12	12	16	16	7
Non-S&E, total	63	53	55	54	46	51	48	46	58	72
Health	2	2	1	2	3	1	0	0	3	2
Humanities[1]	13	15	13	12	12	11	14	14	19	23
Education	44	32	36	33	26	31	28	26	29	36
Professional/other	4	4	5	7	5	8	6	6	7	11
Grand total, all fields	117	107	107	113	103	118	132	125	131	159

See explanatory information, if any, and SOURCE at end of table.

Table 3. Science and engineering (S&E) doctorates awarded, by citizenship status, sex, racial/ethnic group, and major field of study of recipients: 1985-94

Field of study	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
	U.S. citizens and permanent residents, male, other Hispanic									
Science and engineering, total	98	124	111	131	116	156	170	158	177	159
Engineering, total	11	18	19	35	24	30	31	36	36	37
Chemical	0	1	6	5	3	3	3	8	4	4
Civil	4	5	0	7	6	5	0	3	10	8
Electrical	1	3	3	8	10	7	12	9	8	14
Mechanical	3	4	4	4	0	2	3	7	4	4
Other engineering	3	5	6	11	5	13	13	9	10	7
Sciences, total	87	106	92	96	92	126	139	122	141	122
Physical sciences, total	12	15	14	20	16	24	31	31	38	30
Astronomy	0	1	0	1	1	1	1	2	2	1
Chemistry	4	7	8	13	6	15	18	13	18	14
Physics	8	6	6	6	9	8	12	16	18	15
Other physical sciences	0	1	0	0	0	0	0	0	0	0
Earth, atmospheric, and ocean sciences	2	2	2	1	4	3	10	2	8	2
Mathematics	4	5	5	3	4	3	4	4	10	6
Computer sciences	2	5	2	2	1	2	8	3	5	1
Biological sciences	24	27	21	27	27	27	25	32	28	38
Agricultural sciences	7	6	5	16	4	6	8	7	5	7
Psychology	14	19	13	17	15	30	26	20	16	13
Social sciences	22	27	30	10	21	31	27	23	31	25
Non-S&E, total	70	65	70	53	71	71	72	88	87	75
Health	3	1	2	3	0	1	5	1	5	3
Humanities[1]	40	26	31	26	29	33	39	41	35	39
Education	22	24	31	18	30	28	21	33	39	22
Professional/other	5	14	6	6	12	9	7	13	8	11
Grand total, all fields	168	189	181	184	187	227	242	246	264	234
	U.S. citizens and permanent residents, male, white									
Science and engineering, total	8,523	8,330	8,221	8,427	8,213	8,647	8,582	8,620	8,722	8,718
Engineering, total	1,082	1,218	1,314	1,491	1,502	1,614	1,602	1,639	1,762	1,711
Chemical	190	196	223	272	293	270	277	225	244	211
Civil	120	139	149	171	157	167	143	147	143	153
Electrical	243	299	271	341	378	411	444	447	503	493
Mechanical	159	198	219	237	224	267	236	306	295	308
Other engineering	370	386	452	470	450	499	502	514	577	546
Sciences, total	7,441	7,112	6,907	6,936	6,711	7,033	6,980	6,981	6,960	7,007
Physical sciences, total	1,621	1,563	1,622	1,609	1,454	1,623	1,585	1,573	1,523	1,616
Astronomy	69	76	60	81	63	70	77	84	79	77
Chemistry	1,013	952	996	981	872	969	926	900	846	872
Physics	534	524	553	535	509	570	572	575	590	656
Other physical sciences	5	11	13	12	10	14	10	14	8	11
Earth, atmospheric, and ocean sciences	338	324	310	380	388	385	415	353	345	380
Mathematics	280	282	258	273	281	293	335	332	352	355
Computer sciences	156	153	184	225	252	259	282	309	327	326
Biological sciences	1,962	1,911	1,763	1,852	1,784	1,821	1,871	1,847	1,835	1,757
Agricultural sciences	546	447	445	408	421	455	422	364	323	367
Psychology	1,302	1,234	1,170	1,094	1,065	1,074	991	1,078	1,095	1,031
Social sciences	1,236	1,198	1,155	1,095	1,066	1,123	1,079	1,125	1,160	1,175
Non-S&E, total	4,654	4,388	4,388	4,367	4,216	4,513	4,563	4,639	4,606	4,823
Health	152	142	191	179	195	203	199	177	208	258
Humanities[1]	1,388	1,329	1,292	1,368	1,303	1,505	1,516	1,628	1,606	1,725
Education	2,357	2,166	2,102	2,022	1,911	2,030	1,996	1,981	1,975	1,965
Professional/other	757	751	803	798	807	775	852	853	817	875
Grand total, all fields	13,177	12,718	12,609	12,794	12,429	13,160	13,145	13,259	13,328	13,541

See explanatory information, if any, and SOURCE at end of table.

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Table 3. Science and engineering (S&E) doctorates awarded, by citizenship status, sex, racial/ethnic group, and major field of study of recipients: 1985-94

Field of study	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
	U.S. citizens and permanent residents, female									
Science and engineering, total	4,184	4,367	4,424	4,611	4,921	5,181	5,595	5,577	6,023	6,495
Engineering, total	136	162	174	196	275	276	316	328	348	448
Chemical	31	42	52	53	69	62	60	82	64	78
Civil	11	15	11	15	40	34	25	23	32	55
Electrical	22	25	15	33	36	47	48	67	80	88
Mechanical	18	13	11	17	19	24	37	25	36	54
Other engineering	54	67	85	78	111	109	146	131	136	173
Sciences, total	4,048	4,205	4,250	4,415	4,646	4,905	5,279	5,249	5,675	6,047
Physical sciences, total	347	376	399	410	437	470	454	514	521	624
Astronomy	9	7	9	14	13	18	7	15	23	21
Chemistry	278	309	327	328	365	383	368	401	401	463
Physics	59	55	62	60	58	62	76	94	94	137
Other physical sciences	1	5	1	8	1	7	3	4	3	3
Earth, atmospheric, and ocean sciences	91	76	89	112	120	118	157	147	119	144
Mathematics	82	73	77	70	101	93	112	117	164	149
Computer sciences	24	43	54	46	84	90	94	83	109	94
Biological sciences	1,078	1,116	1,144	1,252	1,276	1,311	1,389	1,438	1,583	1,740
Agricultural sciences	126	123	126	128	164	159	137	150	134	160
Psychology	1,439	1,470	1,529	1,512	1,563	1,772	1,890	1,780	1,939	1,974
Social sciences	861	928	832	885	901	892	1,046	1,020	1,106	1,162
Non-S&E, total	5,288	5,444	5,445	5,412	5,570	6,066	6,220	6,584	6,680	7,007
Health	389	424	415	476	531	517	588	629	679	722
Humanities[1]	1,210	1,199	1,221	1,244	1,243	1,422	1,492	1,608	1,697	1,787
Education	3,194	3,274	3,210	3,139	3,188	3,429	3,438	3,653	3,574	3,739
Professional/other	495	547	599	553	608	698	702	694	730	759
Grand total, all fields	9,472	9,811	9,869	10,023	10,491	11,247	11,815	12,161	12,703	13,502
	U.S. citizens and permanent residents, female, American Indian/Alaskan Native									
Science and engineering, total	20	19	21	15	20	17	19	27	18	24
Engineering, total	0	1	0	0	2	0	2	3	0	2
Chemical	0	0	0	0	0	0	1	0	0	0
Civil	0	0	0	0	1	0	0	1	0	0
Electrical	0	0	0	0	0	0	1	1	0	0
Mechanical	0	0	0	0	0	0	0	0	0	0
Other engineering	0	1	0	0	1	0	0	1	0	2
Sciences, total	20	18	21	15	18	17	17	24	18	22
Physical sciences, total	0	2	2	1	0	0	2	2	2	1
Astronomy	0	0	0	0	0	0	0	0	0	0
Chemistry	0	2	2	0	0	0	2	2	1	0
Physics	0	0	0	1	0	0	0	0	1	1
Other physical sciences	0	0	0	0	0	0	0	0	0	0
Earth, atmospheric, and ocean sciences	0	1	0	1	2	1	1	0	0	0
Mathematics	0	1	0	0	0	0	0	1	0	0
Computer sciences	0	0	1	0	1	0	0	0	1	1
Biological sciences	9	6	4	2	3	1	4	5	2	5
Agricultural sciences	0	0	0	2	1	0	0	0	0	0
Psychology	5	5	12	4	8	12	8	9	9	7
Social sciences	6	3	2	5	3	3	2	7	4	8
Non-S&E, total	36	22	32	27	25	27	39	40	42	47
Health	1	6	2	4	3	0	2	2	6	5
Humanities[1]	5	1	4	4	5	2	7	6	3	8
Education	28	10	23	18	15	21	27	30	30	26
Professional/other	2	5	3	1	2	4	3	2	3	8
Grand total, all fields	56	41	53	42	45	44	58	67	60	71

See explanatory information, if any, and SOURCE at end of table.

Table 3. Science and engineering (S&E) doctorates awarded, by citizenship status, sex, racial/ethnic group, and major field of study of recipients: 1985-94

Field of study	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
	U.S. citizens and permanent residents, female, Asian									
Science and engineering, total	189	194	231	222	241	251	374	412	531	820
Engineering, total	21	15	22	18	34	33	49	61	61	119
Chemical	6	6	6	6	11	11	9	16	7	25
Civil	1	0	2	1	3	3	4	2	2	4
Electrical	4	4	3	6	8	6	5	21	25	31
Mechanical	1	0	0	0	1	3	3	4	3	24
Other engineering	9	5	11	5	11	10	28	18	24	35
Sciences, total	168	179	209	204	207	218	325	351	470	701
Physical sciences, total	41	41	36	42	36	42	48	79	97	178
Astronomy	0	2	0	1	2	2	0	2	2	1
Chemistry	33	35	31	28	23	29	36	55	72	129
Physics	8	4	5	13	11	11	12	22	23	47
Other physical sciences	0	0	0	0	0	0	0	0	0	1
Earth, atmospheric, and ocean sciences	1	1	3	4	4	1	6	8	8	17
Mathematics	6	5	11	11	3	7	18	18	36	26
Computer sciences	0	3	6	6	10	7	15	12	19	16
Biological sciences	57	67	77	73	89	87	129	132	172	269
Agricultural sciences	5	4	7	7	6	6	8	12	9	20
Psychology	21	23	31	27	27	31	44	37	51	77
Social sciences	37	35	38	34	32	37	57	53	78	98
Non-S&E, total	114	100	112	143	120	145	185	208	199	254
Health	14	12	17	12	9	22	23	30	23	46
Humanities[1]	23	26	30	33	35	34	42	51	66	66
Education	61	50	49	71	59	65	85	95	86	106
Professional/other	16	12	16	27	17	24	35	32	24	36
Grand total, all fields	303	294	343	365	361	396	559	620	730	1,074
	U.S. citizens and permanent residents, female, black									
Science and engineering, total	138	149	130	136	153	147	191	166	208	214
Engineering, total	4	4	1	4	3	6	8	6	11	13
Chemical	2	1	0	1	1	2	1	1	3	4
Civil	0	1	0	0	0	0	2	0	2	2
Electrical	0	0	0	2	0	1	2	2	2	3
Mechanical	0	1	0	0	0	0	1	0	0	1
Other engineering	2	1	1	1	2	3	2	3	4	3
Sciences, total	134	145	129	132	150	141	183	160	197	201
Physical sciences, total	7	4	3	8	7	7	5	6	10	13
Astronomy	0	0	0	0	0	0	0	1	0	0
Chemistry	6	3	2	7	7	7	5	5	9	9
Physics	1	1	1	1	0	0	0	0	0	4
Other physical sciences	0	0	0	0	0	0	0	0	1	0
Earth, atmospheric, and ocean sciences	0	0	1	0	1	2	1	1	0	1
Mathematics	0	3	2	0	3	1	4	0	1	3
Computer sciences	0	0	1	0	1	0	4	1	4	2
Biological sciences	21	22	25	23	24	21	31	24	32	43
Agricultural sciences	1	3	3	5	1	1	1	3	4	6
Psychology	63	67	59	57	61	72	85	75	75	78
Social sciences	42	46	35	39	52	37	52	50	71	55
Non-S&E, total	409	371	342	389	357	421	419	425	491	507
Health	12	15	19	24	20	18	23	24	41	35
Humanities[1]	34	35	39	36	36	35	48	43	42	55
Education	326	289	253	276	270	326	292	325	354	357
Professional/other	37	32	31	53	31	42	56	33	54	60
Grand total, all fields	547	520	472	525	510	568	610	591	699	721

See explanatory information, if any, and SOURCE at end of table.

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Table 3. Science and engineering (S&E) doctorates awarded, by citizenship status, sex, racial/ethnic group, and major field of study of recipients: 1985-94

Field of study	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
	U.S. citizens and permanent residents, female, Hispanic									
Science and engineering, total	114	118	141	149	155	178	186	205	222	229
Engineering, total	0	3	5	6	8	9	10	15	12	6
Chemical	0	2	3	0	4	1	4	4	3	0
Civil	0	0	0	1	0	2	2	1	2	3
Electrical	0	1	0	2	1	1	0	3	3	0
Mechanical	0	0	0	1	1	1	2	2	0	1
Other engineering	0	0	2	2	2	4	2	5	4	2
Sciences, total	114	115	136	143	147	169	176	190	210	223
Physical sciences, total	7	9	17	16	18	26	11	20	20	21
Astronomy	0	1	0	0	0	0	0	1	0	0
Chemistry	5	6	15	13	17	24	9	16	18	16
Physics	2	2	2	3	1	2	2	3	2	5
Other physical sciences	0	0	0	0	0	0	0	0	0	0
Earth, atmospheric, and ocean sciences	1	1	1	4	3	4	2	6	2	2
Mathematics	5	3	2	0	4	4	4	3	2	3
Computer sciences	2	0	0	0	3	1	1	1	1	0
Biological sciences	23	27	24	27	21	33	39	43	57	61
Agricultural sciences	4	6	4	2	3	6	3	4	5	12
Psychology	41	43	63	55	63	57	70	78	86	90
Social sciences	31	26	25	39	32	38	46	35	37	34
Non-S&E, total	170	188	185	159	162	210	223	222	231	282
Health	8	7	8	6	7	15	9	9	16	18
Humanities[1]	48	46	52	55	49	75	72	63	73	89
Education	99	128	115	92	97	105	124	132	125	159
Professional/other	15	7	10	6	9	15	18	18	17	16
Grand total, all fields	284	306	326	308	317	388	409	427	453	511
	U.S. citizens and permanent residents, female, Puerto Rican									
Science and engineering, total	26	25	33	38	39	48	47	49	42	59
Engineering, total	0	2	1	2	1	2	2	3	2	0
Chemical	0	2	0	0	0	0	1	0	0	0
Civil	0	0	0	1	0	0	0	0	1	0
Electrical	0	0	0	0	0	1	0	1	1	0
Mechanical	0	0	0	0	1	0	0	1	0	0
Other engineering	0	0	1	1	0	1	1	1	0	0
Sciences, total	26	23	32	36	38	46	45	46	40	59
Physical sciences, total	4	1	9	7	4	10	6	6	5	7
Astronomy	0	0	0	0	0	0	0	0	0	0
Chemistry	3	1	9	6	4	10	5	5	5	6
Physics	1	0	0	1	0	0	1	1	0	1
Other physical sciences	0	0	0	0	0	0	0	0	0	0
Earth, atmospheric, and ocean sciences	0	0	0	0	0	1	0	0	0	0
Mathematics	0	1	2	0	3	0	0	1	0	0
Computer sciences	0	0	0	0	0	0	0	0	1	0
Biological sciences	4	3	7	10	4	10	11	11	11	14
Agricultural sciences	1	1	3	0	2	1	0	0	3	3
Psychology	8	9	7	14	16	15	14	19	11	30
Social sciences	9	8	4	5	9	9	14	9	9	5
Non-S&E, total	55	36	52	48	51	58	60	70	70	75
Health	3	2	3	2	3	6	1	1	3	4
Humanities[1]	11	7	11	14	12	20	19	12	18	22
Education	33	25	33	29	35	30	36	53	46	45
Professional/other	8	2	5	3	1	2	4	4	3	4
Grand total, all fields	81	61	85	86	90	106	107	119	112	134

See explanatory information, if any, and SOURCE at end of table.

Table 3. Science and engineering (S&E) doctorates awarded, by citizenship status, sex, racial/ethnic group, and major field of study of recipients: 1985-94

Field of study	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
	U.S. citizens and permanent residents, female, Mexican American									
Science and engineering, total	33	27	27	35	38	37	42	41	49	58
Engineering, total	0	0	1	0	5	2	2	0	2	2
Chemical	0	0	0	0	3	0	1	0	0	0
Civil	0	0	0	0	0	1	0	0	0	0
Electrical	0	0	0	0	1	0	0	0	0	0
Mechanical	0	0	0	0	0	1	1	0	0	0
Other engineering	0	0	1	0	1	0	0	0	2	2
Sciences, total	33	27	26	35	33	35	40	41	47	56
Physical sciences, total	1	3	1	1	2	3	3	2	3	4
Astronomy	0	0	0	0	0	0	0	0	0	0
Chemistry	1	2	0	1	2	3	2	2	2	3
Physics	0	1	1	0	0	0	1	0	1	1
Other physical sciences	0	0	0	0	0	0	0	0	0	0
Earth, atmospheric, and ocean sciences	0	0	0	2	0	1	0	2	0	0
Mathematics	2	1	0	0	0	2	2	0	1	1
Computer sciences	0	0	0	0	0	0	0	0	0	0
Biological sciences	5	6	4	2	3	7	7	13	11	13
Agricultural sciences	1	2	0	2	0	1	1	1	1	2
Psychology	15	9	16	19	21	14	15	18	26	23
Social sciences	9	6	5	9	7	7	12	5	5	13
Non-S&E, total	43	61	45	42	36	35	58	53	69	89
Health	2	1	2	1	2	6	3	5	5	3
Humanities[1]	9	8	4	9	10	8	13	10	16	19
Education	29	49	37	30	23	19	39	32	42	64
Professional/other	3	3	2	2	1	2	3	6	6	3
Grand total, all fields	76	88	72	77	74	72	100	94	118	147
	U.S. citizens and permanent residents, female, other Hispanic									
Science and engineering, total	55	66	81	76	78	93	97	115	131	112
Engineering, total	0	1	3	4	2	5	6	12	8	4
Chemical	0	0	3	0	1	1	2	4	3	0
Civil	0	0	0	0	0	1	2	1	1	3
Electrical	0	1	0	2	0	0	0	2	2	0
Mechanical	0	0	0	1	0	0	1	1	0	1
Other engineering	0	0	0	1	1	3	1	4	2	0
Sciences, total	55	65	78	72	76	88	91	103	123	108
Physical sciences, total	2	5	7	8	12	13	2	12	12	10
Astronomy	0	1	0	0	0	0	0	1	0	0
Chemistry	1	3	6	6	11	11	2	9	11	7
Physics	1	1	1	2	1	2	0	2	1	3
Other physical sciences	0	0	0	0	0	0	0	0	0	0
Earth, atmospheric, and ocean sciences	1	1	1	2	3	2	2	4	2	2
Mathematics	3	1	0	0	1	2	2	2	1	2
Computer sciences	2	0	0	0	3	1	1	1	0	0
Biological sciences	14	18	13	15	14	16	21	19	35	34
Agricultural sciences	2	3	1	0	1	4	2	3	1	7
Psychology	18	25	40	22	26	28	41	41	49	37
Social sciences	13	12	16	25	16	22	20	21	23	16
Non-S&E, total	72	91	88	69	75	117	105	99	92	118
Health	3	4	3	3	2	3	5	3	8	11
Humanities[1]	28	31	37	32	27	47	40	41	39	48
Education	37	54	45	33	39	56	49	47	37	50
Professional/other	4	2	3	1	7	11	11	8	8	9
Grand total, all fields	127	157	169	145	153	210	202	214	223	230

See explanatory information, if any, and SOURCE at end of table.

Table 3. Science and engineering (S&E) doctorates awarded, by citizenship status, sex, racial/ethnic group, and major field of study of recipients: 1985-94

Field of study	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
	U.S. citizens and permanent residents, female, white									
Science and engineering, total	3,643	3,818	3,830	4,027	4,287	4,520	4,738	4,701	5,011	5,162
Engineering, total	106	136	144	163	224	226	235	240	261	305
Chemical	21	31	43	45	52	48	45	59	51	48
Civil	10	13	9	12	34	29	16	19	25	46
Electrical	16	20	12	22	27	39	34	40	49	54
Mechanical	17	12	11	16	17	19	30	19	32	26
Other engineering	42	60	69	68	94	91	110	103	104	131
Sciences, total	3,537	3,682	3,686	3,864	4,063	4,294	4,503	4,461	4,750	4,857
Physical sciences, total	285	311	334	338	374	385	383	399	388	407
Astronomy	8	3	9	12	11	16	6	11	21	19
Chemistry	230	256	271	276	316	315	313	318	299	306
Physics	46	47	53	42	46	48	61	66	66	80
Other physical sciences	1	5	1	8	1	6	3	4	2	2
Earth, atmospheric, and ocean sciences	86	73	84	100	110	109	142	132	109	123
Mathematics	70	61	61	59	88	79	84	93	124	116
Computer sciences	21	40	45	40	67	80	73	69	83	75
Biological sciences	951	977	995	1,114	1,120	1,154	1,170	1,221	1,310	1,349
Agricultural sciences	113	110	109	110	149	146	123	129	115	120
Psychology	1,288	1,313	1,346	1,351	1,387	1,571	1,660	1,557	1,712	1,708
Social sciences	723	797	712	752	768	770	868	861	909	959
Non-S&E, total	4,477	4,689	4,677	4,636	4,852	5,195	5,292	5,629	5,681	5,863
Health	350	382	362	427	489	459	522	558	592	609
Humanities[1]	1,076	1,071	1,071	1,103	1,096	1,261	1,305	1,432	1,503	1,556
Education	2,634	2,751	2,713	2,644	2,722	2,870	2,885	3,040	2,962	3,063
Professional/other	417	485	531	462	545	605	580	599	624	635
Grand total, all fields	8,120	8,507	8,507	8,663	9,139	9,715	10,030	10,330	10,692	11,025
	U.S. citizens									
Science and engineering, total	13,134	13,022	12,966	13,369	13,467	14,166	14,624	14,558	14,927	15,149
Engineering, total	1,279	1,383	1,558	1,780	1,864	1,957	2,086	2,109	2,226	2,211
Chemical	240	241	294	358	382	342	348	318	324	293
Civil	130	139	162	187	188	180	173	164	168	203
Electrical	270	327	320	398	440	491	554	597	629	633
Mechanical	193	209	241	256	259	299	297	352	346	356
Other engineering	446	467	541	581	595	645	714	678	759	726
Sciences, total	11,855	11,639	11,408	11,589	11,603	12,209	12,538	12,449	12,701	12,938
Physical sciences, total	2,050	2,032	2,095	2,119	1,984	2,169	2,119	2,157	2,093	2,195
Astronomy	82	88	72	97	78	92	84	100	106	102
Chemistry	1,345	1,320	1,381	1,378	1,298	1,398	1,350	1,328	1,272	1,289
Physics	616	606	627	626	597	660	671	709	704	789
Other physical sciences	7	18	15	18	11	19	14	20	11	15
Earth, atmospheric, and ocean sciences	435	404	410	493	518	516	592	506	462	506
Mathematics	376	366	345	342	393	375	463	454	496	496
Computer sciences	189	202	243	284	338	348	388	422	425	426
Biological sciences	3,148	3,124	2,981	3,131	3,117	3,190	3,310	3,327	3,447	3,415
Agricultural sciences	683	579	584	539	606	630	564	511	457	519
Psychology	2,805	2,767	2,747	2,668	2,683	2,919	2,953	2,900	3,071	3,060
Social sciences	2,169	2,165	2,003	2,013	1,964	2,062	2,149	2,172	2,250	2,321
Non-S&E, total	10,236	10,061	10,017	9,921	9,933	10,739	10,936	11,416	11,481	11,956
Health	550	568	606	657	729	721	780	809	879	961
Humanities[1]	2,635	2,528	2,509	2,610	2,531	2,899	2,975	3,211	3,274	3,484
Education	5,776	5,626	5,491	5,298	5,245	5,635	5,605	5,817	5,755	5,842
Professional/other	1,275	1,339	1,411	1,356	1,428	1,484	1,576	1,579	1,573	1,669
Grand total, all fields	23,370	23,083	22,983	23,290	23,400	24,905	25,560	25,974	26,408	27,105

See explanatory information, if any, and SOURCE at end of table.

Table 3. Science and engineering (S&E) doctorates awarded, by citizenship status, sex, racial/ethnic group, and major field of study of recipients: 1985-94

Field of study	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
	U.S. citizens, American Indian/Alaskan Native									
Science and engineering, total	41	52	53	44	53	42	56	69	43	64
Engineering, total	1	6	7	4	7	4	6	11	2	6
Chemical	0	0	1	2	1	0	1	1	1	1
Civil	0	0	1	1	1	2	1	1	0	0
Electrical	1	2	3	0	0	0	2	4	0	1
Mechanical	0	2	1	1	0	0	1	1	0	0
Other engineering	0	2	1	0	5	2	1	4	1	4
Sciences, total	40	46	46	40	46	38	50	58	41	58
Physical sciences, total	3	5	7	6	10	3	10	12	5	6
Astronomy	0	0	0	0	2	0	0	0	1	0
Chemistry	2	5	6	5	5	3	9	6	2	4
Physics	1	0	1	1	3	0	1	6	2	2
Other physical sciences	0	0	0	0	0	0	0	0	0	0
Earth, atmospheric, and ocean sciences	1	2	0	2	6	1	3	1	4	1
Mathematics	0	1	0	2	0	1	0	2	1	2
Computer sciences	0	0	3	1	2	0	1	2	1	1
Biological sciences	13	17	11	6	7	4	10	13	7	16
Agricultural sciences	4	0	2	6	2	4	4	0	1	1
Psychology	10	9	16	7	11	18	13	15	15	12
Social sciences	9	12	7	10	8	7	9	13	7	19
Non-S&E, total	55	47	62	50	41	54	74	80	77	78
Health	2	6	3	5	3	1	5	5	6	6
Humanities[1]	7	6	10	4	7	6	10	18	10	20
Education	40	26	41	36	25	37	55	50	51	36
Professional/other	6	9	8	5	6	10	4	7	10	16
Grand total, all fields	96	99	115	94	94	96	130	149	120	142
	U.S. citizens, Asian									
Science and engineering, total	374	400	446	454	489	488	598	643	712	735
Engineering, total	90	80	135	141	173	157	187	213	217	202
Chemical	22	17	24	32	40	26	27	25	26	27
Civil	5	8	14	8	14	8	11	12	10	7
Electrical	15	19	41	45	48	51	67	95	86	97
Mechanical	21	10	25	22	25	27	26	35	34	28
Other engineering	27	26	31	34	46	45	56	46	61	43
Sciences, total	284	320	311	313	316	331	411	430	495	533
Physical sciences, total	76	75	67	67	75	86	85	107	121	121
Astronomy	1	5	1	2	0	1	0	2	3	4
Chemistry	57	56	49	48	42	54	62	64	76	69
Physics	18	14	17	17	33	31	23	41	42	47
Other physical sciences	0	0	0	0	0	0	0	0	0	1
Earth, atmospheric, and ocean sciences	8	6	9	8	11	4	7	14	6	7
Mathematics	14	14	18	17	13	11	23	20	28	18
Computer sciences	2	12	10	20	18	10	32	37	27	33
Biological sciences	106	124	106	101	120	116	160	133	190	194
Agricultural sciences	8	12	17	9	7	11	9	13	9	14
Psychology	34	32	38	37	38	44	46	44	52	81
Social sciences	36	45	46	54	34	49	49	62	62	65
Non-S&E, total	142	130	96	160	137	153	189	194	177	214
Health	14	15	19	16	11	26	23	32	17	36
Humanities[1]	36	26	21	36	39	30	42	46	53	59
Education	69	60	41	82	57	67	85	78	83	80
Professional/other	23	29	15	26	30	30	39	38	24	39
Grand total, all fields	516	530	542	614	626	641	787	837	889	949

See explanatory information, if any, and SOURCE at end of table.

Table 3. Science and engineering (S&E) doctorates awarded, by citizenship status, sex, racial/ethnic group, and major field of study of recipients: 1985-94

Field of study	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
	U.S. citizens, black									
Science and engineering, total	294	270	245	272	297	290	362	319	375	387
Engineering, total	19	14	12	19	24	28	43	32	41	44
Chemical	4	1	4	4	2	5	4	8	4	6
Civil	2	2	1	0	2	0	8	0	3	8
Electrical	6	2	0	7	8	7	16	12	13	14
Mechanical	1	3	2	0	5	5	3	3	2	4
Other engineering	6	6	5	8	7	11	12	9	19	12
Sciences, total	275	256	233	253	273	262	319	287	334	343
Physical sciences, total	23	20	16	28	25	19	24	21	29	33
Astronomy	0	0	2	0	0	1	0	1	2	0
Chemistry	19	13	11	17	20	14	18	13	19	23
Physics	4	7	3	11	5	4	6	6	7	9
Other physical sciences	0	0	0	0	0	0	0	1	1	1
Earth, atmospheric, and ocean sciences	2	0	1	2	3	3	2	5	2	3
Mathematics	3	5	10	2	6	4	9	4	5	9
Computer sciences	2	0	2	1	1	1	5	4	5	7
Biological sciences	44	40	45	36	45	36	47	46	63	63
Agricultural sciences	5	7	7	8	6	9	6	5	5	10
Psychology	101	102	88	99	96	111	125	99	117	112
Social sciences	95	82	64	77	91	79	101	103	108	106
Non-S&E, total	618	553	523	542	524	608	641	643	732	705
Health	17	17	25	26	24	25	35	35	52	41
Humanities[1]	63	58	65	67	63	69	84	83	82	94
Education	477	422	381	372	390	455	436	464	513	482
Professional/other	61	56	52	77	47	59	86	61	85	88
Grand total, all fields	912	823	768	814	821	898	1,003	962	1,107	1,092
	U.S. citizens, Hispanic									
Science and engineering, total	250	279	308	331	313	390	410	433	444	462
Engineering, total	16	25	24	43	33	39	48	57	56	49
Chemical	2	4	7	3	5	7	10	10	10	5
Civil	6	3	1	10	4	6	5	6	7	7
Electrical	1	7	4	10	10	9	11	14	16	16
Mechanical	3	3	4	5	3	3	8	10	3	7
Other engineering	4	8	8	15	11	14	14	17	20	14
Sciences, total	234	254	284	288	280	351	362	376	388	413
Physical sciences, total	26	36	48	58	52	63	54	58	65	75
Astronomy	0	1	0	2	1	2	1	4	1	2
Chemistry	14	24	40	44	40	50	39	34	43	49
Physics	12	10	8	12	11	11	14	20	21	24
Other physical sciences	0	1	0	0	0	0	0	0	0	0
Earth, atmospheric, and ocean sciences	4	4	3	7	6	11	12	13	8	7
Mathematics	7	9	9	3	8	7	6	10	9	12
Computer sciences	5	4	4	2	4	4	11	7	5	5
Biological sciences	49	52	52	61	58	73	79	90	93	110
Agricultural sciences	10	7	12	13	12	14	7	9	14	16
Psychology	64	82	92	89	87	100	113	122	120	128
Social sciences	69	60	64	55	53	79	80	67	74	60
Non-S&E, total	311	293	309	264	268	331	321	345	386	420
Health	13	12	11	11	10	17	12	12	19	20
Humanities[1]	92	68	89	86	77	104	105	98	122	129
Education	181	190	185	151	157	179	175	200	209	225
Professional/other	25	23	24	16	24	31	29	35	36	46
Grand total, all fields	561	572	617	595	581	721	731	778	830	882

See explanatory information, if any, and SOURCE at end of table.

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Table 3. Science and engineering (S&E) doctorates awarded, by citizenship status, sex, racial/ethnic group, and major field of study of recipients: 1985-94

Field of study	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
	U.S. citizens, Puerto Rican									
Science and engineering, total	56	74	86	96	93	115	99	120	112	131
Engineering, total	5	11	4	13	7	6	9	13	10	10
Chemical	1	2	1	0	1	2	2	3	2	2
Civil	2	1	0	6	1	1	1	1	1	1
Electrical	0	4	2	2	1	2	0	3	5	3
Mechanical	0	0	0	1	3	0	2	1	1	1
Other engineering	2	4	1	4	1	1	4	5	1	3
Sciences, total	51	63	82	83	86	109	90	107	102	121
Physical sciences, total	8	9	26	23	20	24	17	20	17	26
Astronomy	0	0	0	0	1	1	0	1	0	0
Chemistry	7	5	26	19	16	20	14	14	14	19
Physics	1	4	0	4	3	3	3	5	3	7
Other physical sciences	0	0	0	0	0	0	0	0	0	0
Earth, atmospheric, and ocean sciences	0	1	0	0	0	5	0	3	1	0
Mathematics	0	3	6	1	4	2	0	2	1	1
Computer sciences	0	2	1	0	0	2	3	1	1	4
Biological sciences	10	12	18	20	18	24	23	27	27	28
Agricultural sciences	2	4	6	2	7	5	0	3	10	5
Psychology	12	17	15	26	21	26	20	35	24	43
Social sciences	19	15	10	11	16	21	27	16	21	14
Non-S&E, total	90	64	93	78	83	95	92	109	121	125
Health	4	4	3	4	4	6	3	4	3	6
Humanities[1]	17	11	29	23	22	28	30	22	36	38
Education	58	45	52	44	52	56	52	76	71	67
Professional/other	11	4	9	7	5	5	7	7	11	14
Grand total, all fields	146	138	179	174	176	210	191	229	233	256
	U.S. citizens, Mexican American									
Science and engineering, total	79	76	75	80	82	96	117	110	103	134
Engineering, total	4	5	6	8	10	12	14	10	10	14
Chemical	1	1	1	0	1	2	4	1	1	1
Civil	1	1	1	0	1	2	2	2	0	1
Electrical	1	1	0	1	2	4	3	3	2	4
Mechanical	0	2	1	1	0	2	3	2	0	2
Other engineering	1	0	3	6	6	2	2	2	7	6
Sciences, total	75	71	69	75	72	84	103	100	93	120
Physical sciences, total	8	12	9	11	11	11	15	9	9	20
Astronomy	0	0	0	1	0	0	0	0	0	1
Chemistry	5	10	4	9	10	11	12	6	6	16
Physics	3	2	5	1	1	0	3	3	3	3
Other physical sciences	0	0	0	0	0	0	0	0	0	0
Earth, atmospheric, and ocean sciences	2	0	2	4	1	2	4	6	1	4
Mathematics	3	3	0	0	1	3	3	3	2	4
Computer sciences	2	0	1	0	0	0	0	2	0	0
Biological sciences	10	9	9	10	11	20	23	21	22	29
Agricultural sciences	1	2	3	1	3	6	1	4	2	5
Psychology	23	29	27	28	30	25	34	36	40	38
Social sciences	26	16	18	21	15	17	23	19	17	20
Non-S&E, total	102	108	99	93	77	83	99	97	124	155
Health	4	3	3	3	4	7	3	5	7	3
Humanities[1]	20	19	17	20	21	17	23	22	34	39
Education	71	80	72	63	47	49	64	58	70	99
Professional/other	7	6	7	7	5	10	9	12	13	14
Grand total, all fields	181	184	174	176	159	179	216	207	227	289

See explanatory information, if any, and SOURCE at end of table.

Table 3. Science and engineering (S&E) doctorates awarded, by citizenship status, sex, racial/ethnic group, and major field of study of recipients: 1985-94

Field of study	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
	U.S. citizens, other Hispanic									
Science and engineering, total	115	129	147	152	138	179	194	203	229	197
Engineering, total	7	9	14	22	16	21	25	34	36	25
Chemical	0	1	5	3	3	3	4	6	7	2
Civil	3	1	0	4	2	3	2	3	6	5
Electrical	0	2	2	7	7	3	8	8	9	9
Mechanical	3	1	3	3	0	1	3	7	2	4
Other engineering	1	4	4	5	4	11	8	10	12	5
Sciences, total	108	120	133	130	122	158	169	169	193	172
Physical sciences, total	10	15	13	24	21	28	22	29	39	29
Astronomy	0	1	0	1	0	1	1	3	1	1
Chemistry	2	9	10	16	14	19	13	14	23	14
Physics	8	4	3	7	7	8	8	12	15	14
Other physical sciences	0	1	0	0	0	0	0	0	0	0
Earth, atmospheric, and ocean sciences	2	3	1	3	5	4	8	4	6	3
Mathematics	4	3	3	2	3	2	3	5	6	7
Computer sciences	3	2	2	2	4	2	8	4	4	1
Biological sciences	29	31	25	31	29	29	33	42	44	53
Agricultural sciences	7	1	3	10	2	3	6	2	2	6
Psychology	29	36	50	35	36	49	59	51	56	47
Social sciences	24	29	36	23	22	41	30	32	36	26
Non-S&E, total	119	121	117	93	108	153	130	139	141	140
Health	5	5	5	4	2	4	6	3	9	11
Humanities[1]	55	38	43	43	34	59	52	54	52	52
Education	52	65	61	44	58	74	59	66	68	59
Professional/other	7	13	8	2	14	16	13	16	12	18
Grand total, all fields	234	250	264	245	246	332	324	342	370	337
	U.S. citizens, white									
Science and engineering, total	11,821	11,746	11,611	12,002	12,048	12,691	12,836	12,846	13,207	13,346
Engineering, total	1,097	1,229	1,331	1,530	1,583	1,690	1,707	1,749	1,890	1,882
Chemical	199	216	252	309	328	299	300	267	282	246
Civil	115	124	140	162	163	162	143	142	147	181
Electrical	231	293	256	324	360	413	430	457	506	502
Mechanical	160	181	203	225	218	261	244	299	302	313
Other engineering	392	415	480	510	514	555	590	584	653	640
Sciences, total	10,724	10,517	10,280	10,472	10,465	11,001	11,129	11,097	11,317	11,464
Physical sciences, total	1,856	1,833	1,902	1,899	1,777	1,939	1,896	1,916	1,848	1,942
Astronomy	76	78	68	90	73	86	81	91	97	93
Chemistry	1,219	1,182	1,243	1,235	1,167	1,249	1,201	1,191	1,119	1,138
Physics	555	557	577	556	526	586	601	616	623	698
Other physical sciences	6	16	14	18	11	18	13	18	9	13
Earth, atmospheric, and ocean sciences	409	382	381	462	484	488	546	469	439	485
Mathematics	337	326	295	308	351	346	403	407	445	448
Computer sciences	170	176	215	253	296	325	330	363	379	375
Biological sciences	2,869	2,840	2,696	2,878	2,832	2,909	2,965	2,998	3,055	3,003
Agricultural sciences	646	543	541	493	560	582	527	475	426	471
Psychology	2,552	2,509	2,476	2,404	2,422	2,596	2,615	2,579	2,751	2,702
Social sciences	1,885	1,908	1,774	1,775	1,743	1,816	1,847	1,890	1,974	2,038
Non-S&E, total	8,942	8,883	8,851	8,781	8,844	9,477	9,579	10,029	10,023	10,441
Health	494	508	536	596	675	648	692	714	782	846
Humanities[1]	2,377	2,324	2,269	2,375	2,288	2,649	2,685	2,926	2,969	3,148
Education	4,932	4,846	4,753	4,594	4,575	4,842	4,812	4,977	4,870	4,973
Professional/other	1,139	1,205	1,293	1,216	1,306	1,338	1,390	1,412	1,402	1,474
Grand total, all fields	20,763	20,629	20,462	20,783	20,892	22,168	22,415	22,875	23,230	23,787

See explanatory information, if any, and SOURCE at end of table.

Table 3. Science and engineering (S&E) doctorates awarded, by citizenship status, sex, racial/ethnic group, and major field of study of recipients: 1985-94

Field of study	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
	U.S. citizens, male									
Science and engineering, total	9,135	8,860	8,801	9,014	8,820	9,274	9,387	9,396	9,425	9,445
Engineering, total	1,160	1,241	1,409	1,602	1,615	1,709	1,807	1,826	1,930	1,868
Chemical	211	205	250	312	322	288	297	250	265	236
Civil	121	129	153	174	151	151	152	144	138	155
Electrical	250	306	306	370	411	446	510	542	572	569
Mechanical	178	196	231	240	240	276	263	329	313	324
Other engineering	400	405	469	506	491	548	585	561	642	584
Sciences, total	7,975	7,619	7,392	7,412	7,205	7,565	7,580	7,570	7,495	7,577
Physical sciences, total	1,726	1,695	1,733	1,750	1,582	1,747	1,707	1,710	1,647	1,743
Astronomy	73	82	63	84	67	76	77	87	86	82
Chemistry	1,084	1,044	1,085	1,073	956	1,046	1,014	971	920	945
Physics	563	556	571	582	549	613	605	636	633	703
Other physical sciences	6	13	14	11	10	12	11	16	8	13
Earth, atmospheric, and ocean sciences	348	331	328	384	404	398	444	368	351	381
Mathematics	306	297	280	283	300	293	370	357	372	375
Computer sciences	165	165	193	245	266	268	305	353	343	349
Biological sciences	2,116	2,049	1,904	1,960	1,927	1,958	2,021	1,998	1,999	1,926
Agricultural sciences	563	463	468	420	450	483	436	377	333	387
Psychology	1,396	1,330	1,259	1,190	1,146	1,195	1,106	1,176	1,201	1,145
Social sciences	1,355	1,289	1,227	1,180	1,130	1,223	1,191	1,231	1,249	1,271
Non-S&E, total	5,088	4,777	4,774	4,711	4,576	4,892	4,990	5,104	5,068	5,265
Health	171	157	207	196	207	221	221	203	226	283
Humanities[1]	1,491	1,396	1,371	1,451	1,391	1,580	1,605	1,728	1,699	1,835
Education	2,632	2,419	2,359	2,234	2,132	2,273	2,249	2,245	2,262	2,195
Professional/other	794	805	837	830	846	818	915	928	881	952
Grand total, all fields	14,223	13,637	13,575	13,725	13,396	14,166	14,377	14,500	14,493	14,710
	U.S. citizens, male, American Indian/Alaskan Native									
Science and engineering, total	21	33	32	29	33	25	37	42	25	40
Engineering, total	1	5	7	4	5	4	4	8	2	4
Chemical	0	0	1	2	1	0	0	1	1	1
Civil	0	0	1	1	0	2	1	0	0	0
Electrical	1	2	3	0	0	0	1	3	0	1
Mechanical	0	2	1	1	0	0	1	1	0	0
Other engineering	0	1	1	0	4	2	1	3	1	2
Sciences, total	20	28	25	25	28	21	33	34	23	36
Physical sciences, total	3	3	5	5	10	3	8	10	3	5
Astronomy	0	0	0	0	2	0	0	0	1	0
Chemistry	2	3	4	5	5	3	7	4	1	4
Physics	1	0	1	0	3	0	1	6	1	1
Other physical sciences	0	0	0	0	0	0	0	0	0	0
Earth, atmospheric, and ocean sciences	1	1	0	1	4	0	2	1	4	1
Mathematics	0	0	0	2	0	1	0	1	1	2
Computer sciences	0	0	2	1	1	0	1	2	0	0
Biological sciences	4	11	7	4	4	3	6	8	5	11
Agricultural sciences	4	0	2	4	1	4	4	0	1	1
Psychology	5	4	4	3	3	6	5	6	6	5
Social sciences	3	9	5	5	5	4	7	6	3	11
Non-S&E, total	19	25	30	23	16	27	37	40	35	31
Health	1	0	1	1	0	1	3	3	0	1
Humanities[1]	2	5	6	0	2	4	3	12	7	12
Education	12	16	18	18	10	16	29	20	21	10
Professional/other	4	4	5	4	4	6	2	5	7	8
Grand total, all fields	40	58	62	52	49	52	74	82	60	71

See explanatory information, if any, and SOURCE at end of table.

Table 3. Science and engineering (S&E) doctorates awarded, by citizenship status, sex, racial/ethnic group, and major field of study of recipients: 1985-94

Field of study	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
	U.S. citizens, male, Asian									
Science and engineering, total	260	284	322	337	366	359	406	448	479	491
Engineering, total	76	74	124	132	150	137	160	180	193	171
Chemical	17	15	21	29	31	19	20	18	22	20
Civil	5	8	13	8	12	7	10	11	10	7
Electrical	12	18	39	42	43	47	64	83	79	86
Mechanical	20	10	25	22	24	25	23	33	33	23
Other engineering	22	23	26	31	40	39	43	35	49	35
Sciences, total	184	210	198	205	216	222	246	268	286	320
Physical sciences, total	53	55	52	52	62	67	65	72	79	87
Astronomy	1	4	1	2	0	1	0	1	2	4
Chemistry	37	39	36	34	34	41	47	36	39	42
Physics	15	12	15	16	28	25	18	35	38	40
Other physical sciences	0	0	0	0	0	0	0	0	0	1
Earth, atmospheric, and ocean sciences	7	5	8	6	9	3	4	11	4	6
Mathematics	12	12	14	13	12	8	18	17	18	14
Computer sciences	2	12	6	19	14	9	25	34	23	29
Biological sciences	67	72	61	64	73	77	91	71	102	114
Agricultural sciences	7	10	14	5	4	9	6	8	5	12
Psychology	18	15	14	13	20	19	13	16	20	20
Social sciences	18	29	29	33	22	30	24	39	35	38
Non-S&E, total	69	63	47	77	75	68	75	80	72	100
Health	5	8	11	9	6	12	10	9	7	15
Humanities[1]	25	8	8	16	24	18	16	22	17	31
Education	24	26	18	34	23	19	26	21	32	28
Professional/other	15	21	10	18	22	19	23	28	16	26
Grand total, all fields	329	347	369	414	441	427	481	528	551	591
	U.S. citizens, male, black									
Science and engineering, total	163	129	123	148	147	153	186	161	179	190
Engineering, total	16	10	11	15	21	23	35	26	30	31
Chemical	2	0	4	3	1	3	3	7	1	2
Civil	2	1	1	0	2	0	6	0	1	6
Electrical	6	2	0	5	8	6	14	10	11	11
Mechanical	1	2	2	0	5	5	2	3	2	3
Other engineering	5	5	4	7	5	9	10	6	15	9
Sciences, total	147	119	112	133	126	130	151	135	149	159
Physical sciences, total	18	16	13	21	18	13	20	16	20	21
Astronomy	0	0	2	0	0	1	0	0	2	0
Chemistry	15	10	9	11	13	8	14	9	11	15
Physics	3	6	2	10	5	4	6	6	7	5
Other physical sciences	0	0	0	0	0	0	0	1	0	1
Earth, atmospheric, and ocean sciences	2	0	0	2	2	1	1	4	2	2
Mathematics	3	2	8	2	4	3	5	4	4	6
Computer sciences	2	0	1	1	0	1	1	3	2	5
Biological sciences	24	21	23	18	22	16	22	24	33	22
Agricultural sciences	4	4	4	4	5	8	5	5	3	7
Psychology	39	36	30	45	35	42	42	25	43	40
Social sciences	55	40	33	40	40	46	55	54	42	56
Non-S&E, total	216	194	194	167	180	198	231	231	260	217
Health	5	3	7	3	4	7	13	11	15	11
Humanities[1]	29	24	28	35	29	35	37	41	44	42
Education	158	142	136	104	129	139	149	147	168	130
Professional/other	24	25	23	25	18	17	32	32	33	34
Grand total, all fields	379	323	317	315	327	351	417	392	439	407

See explanatory information, if any, and SOURCE at end of table.

Table 3. Science and engineering (S&E) doctorates awarded, by citizenship status, sex, racial/ethnic group, and major field of study of recipients: 1985-94

Field of study	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
	U.S. citizens, male, Hispanic									
Science and engineering, total	151	177	182	202	180	237	241	263	256	262
Engineering, total	16	22	21	37	27	33	38	46	45	44
Chemical	2	2	6	3	3	7	6	8	7	5
Civil	6	3	1	9	4	5	3	5	5	5
Electrical	1	6	4	8	9	8	11	12	13	16
Mechanical	3	3	4	4	2	2	6	8	3	6
Other engineering	4	8	6	13	9	11	12	13	17	12
Sciences, total	135	155	161	165	153	204	203	217	211	218
Physical sciences, total	20	28	33	45	37	41	44	43	49	58
Astronomy	0	0	0	2	1	2	1	3	1	2
Chemistry	10	18	27	33	25	30	31	23	29	36
Physics	10	9	6	10	11	9	12	17	19	20
Other physical sciences	0	1	0	0	0	0	0	0	0	0
Earth, atmospheric, and ocean sciences	4	3	3	3	4	7	11	9	6	5
Mathematics	5	6	7	3	4	4	3	7	8	9
Computer sciences	3	4	4	2	1	3	10	6	4	5
Biological sciences	28	29	33	39	43	45	44	55	47	61
Agricultural sciences	7	4	8	12	9	11	6	7	9	9
Psychology	25	43	31	36	27	47	47	52	42	42
Social sciences	43	38	42	25	28	46	38	38	46	29
Non-S&E, total	149	125	150	119	127	143	129	147	166	175
Health	6	5	3	6	3	2	4	4	4	3
Humanities[1]	49	34	51	38	41	44	49	51	55	67
Education	83	69	82	65	68	80	63	74	87	75
Professional/other	11	17	14	10	15	17	13	18	20	30
Grand total, all fields	300	302	332	321	307	380	370	410	422	437
	U.S. citizens, male, Puerto Rican									
Science and engineering, total	30	49	53	58	54	67	52	71	70	72
Engineering, total	5	9	3	11	6	4	7	10	8	10
Chemical	1	0	1	0	1	2	1	3	2	2
Civil	2	1	0	5	1	1	1	1	0	1
Electrical	0	4	2	2	1	1	0	2	4	3
Mechanical	0	0	0	1	2	0	2	0	1	1
Other engineering	2	4	0	3	1	0	3	4	1	3
Sciences, total	25	40	50	47	48	63	45	61	62	62
Physical sciences, total	4	8	17	16	16	14	11	14	12	19
Astronomy	0	0	0	0	1	1	0	1	0	0
Chemistry	4	4	17	13	12	10	9	9	9	13
Physics	0	4	0	3	3	3	2	4	3	6
Other physical sciences	0	0	0	0	0	0	0	0	0	0
Earth, atmospheric, and ocean sciences	0	1	0	0	0	4	0	3	1	0
Mathematics	0	2	4	1	1	2	0	1	1	1
Computer sciences	0	2	1	0	0	2	3	1	0	4
Biological sciences	6	9	11	10	14	14	12	16	16	14
Agricultural sciences	1	3	3	2	5	4	0	3	7	2
Psychology	4	8	8	12	5	11	6	16	13	13
Social sciences	10	7	6	6	7	12	13	7	12	9
Non-S&E, total	35	28	41	30	32	37	32	39	51	50
Health	1	2	0	2	1	0	2	3	0	2
Humanities[1]	6	4	18	9	10	8	11	10	18	16
Education	25	20	19	15	17	26	16	23	25	22
Professional/other	3	2	4	4	4	3	3	3	8	10
Grand total, all fields	65	77	94	88	86	104	84	110	121	122

See explanatory information, if any, and SOURCE at end of table.

Table 3. Science and engineering (S&E) doctorates awarded, by citizenship status, sex, racial/ethnic group, and major field of study of recipients: 1985-94

Field of study	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
	U.S. citizens, male, Mexican American									
Science and engineering, total	49	50	48	51	48	61	76	72	61	80
Engineering, total	4	5	5	8	7	10	12	10	9	12
Chemical	1	1	1	0	0	2	3	1	1	1
Civil	1	1	1	0	1	1	2	2	0	1
Electrical	1	1	0	1	1	4	3	3	2	4
Mechanical	0	2	1	1	0	1	2	2	0	2
Other engineering	1	0	2	6	5	2	2	2	6	4
Sciences, total	45	45	43	43	41	51	64	62	52	68
Physical sciences, total	7	9	8	10	9	8	12	7	7	17
Astronomy	0	0	0	1	0	0	0	0	0	1
Chemistry	4	8	4	8	8	8	10	4	5	14
Physics	3	1	4	1	1	0	2	3	2	2
Other physical sciences	0	0	0	0	0	0	0	0	0	0
Earth, atmospheric, and ocean sciences	2	0	2	2	1	1	4	4	1	4
Mathematics	3	2	0	0	1	1	1	3	2	3
Computer sciences	2	0	1	0	0	0	0	2	0	0
Biological sciences	5	3	5	9	8	13	16	10	12	16
Agricultural sciences	0	0	3	0	3	6	1	3	1	4
Psychology	9	20	11	9	10	11	19	19	16	17
Social sciences	17	11	13	13	9	11	11	14	13	7
Non-S&E, total	60	50	55	51	43	48	44	45	55	69
Health	2	2	1	2	2	1	0	0	2	0
Humanities[1]	12	13	13	11	12	9	11	13	18	22
Education	42	31	36	33	25	30	27	26	28	36
Professional/other	4	4	5	5	4	8	6	6	7	11
Grand total, all fields	109	100	103	102	91	109	120	117	116	149
	U.S. citizens, male, other Hispanic									
Science and engineering, total	72	78	81	93	78	109	113	120	125	110
Engineering, total	7	8	13	18	14	19	19	26	28	22
Chemical	0	1	4	3	2	3	2	4	4	2
Civil	3	1	0	4	2	3	0	2	5	3
Electrical	0	1	2	5	7	3	8	7	7	9
Mechanical	3	1	3	2	0	1	2	6	2	3
Other engineering	1	4	4	4	3	9	7	7	10	5
Sciences, total	65	70	68	75	64	90	94	94	97	88
Physical sciences, total	9	11	8	19	12	19	21	22	30	22
Astronomy	0	0	0	1	0	1	1	2	1	1
Chemistry	2	6	6	12	5	12	12	10	15	9
Physics	7	4	2	6	7	6	8	10	14	12
Other physical sciences	0	1	0	0	0	0	0	0	0	0
Earth, atmospheric, and ocean sciences	2	2	1	1	3	2	7	2	4	1
Mathematics	2	2	3	2	2	1	2	3	5	5
Computer sciences	1	2	2	2	1	1	7	3	4	1
Biological sciences	17	17	17	20	21	18	16	29	19	31
Agricultural sciences	6	1	2	10	1	1	5	1	1	3
Psychology	12	15	12	15	12	25	22	17	13	12
Social sciences	16	20	23	6	12	23	14	17	21	13
Non-S&E, total	54	47	54	38	52	58	53	63	60	56
Health	3	1	2	2	0	1	2	1	2	1
Humanities[1]	31	17	20	18	19	27	27	28	19	29
Education	16	18	27	17	26	24	20	25	34	17
Professional/other	4	11	5	1	7	6	4	9	5	9
Grand total, all fields	126	125	135	131	130	167	166	183	185	166

See explanatory information, if any, and SOURCE at end of table.

Table 3. Science and engineering (S&E) doctorates awarded, by citizenship status, sex, racial/ethnic group, and major field of study of recipients: 1985-94

Field of study	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
	U.S. citizens, male, white									
Science and engineering, total	8,264	8,025	7,899	8,087	7,881	8,290	8,235	8,290	8,367	8,342
Engineering, total	1,000	1,104	1,199	1,375	1,371	1,474	1,486	1,522	1,642	1,591
Chemical	179	187	212	268	280	254	262	211	233	201
Civil	106	116	132	151	131	135	128	125	122	137
Electrical	216	274	244	304	337	374	397	419	461	452
Mechanical	146	169	193	210	201	242	217	280	271	288
Other engineering	353	358	418	442	422	469	482	487	555	513
Sciences, total	7,264	6,921	6,700	6,712	6,510	6,816	6,749	6,768	6,725	6,751
Physical sciences, total	1,573	1,539	1,580	1,570	1,412	1,571	1,524	1,534	1,473	1,556
Astronomy	68	75	59	78	62	70	75	81	78	74
Chemistry	990	941	982	964	857	942	896	884	828	843
Physics	510	512	526	517	483	547	543	555	560	628
Other physical sciences	5	11	13	11	10	12	10	14	7	11
Earth, atmospheric, and ocean sciences	326	312	301	363	377	379	409	339	332	365
Mathematics	272	266	238	253	268	272	324	319	334	338
Computer sciences	149	139	172	215	235	248	260	299	307	305
Biological sciences	1,943	1,880	1,726	1,798	1,745	1,776	1,825	1,802	1,782	1,698
Agricultural sciences	534	435	437	387	415	441	406	349	314	353
Psychology	1,284	1,215	1,159	1,078	1,049	1,058	980	1,059	1,080	1,024
Social sciences	1,183	1,135	1,087	1,048	1,009	1,071	1,021	1,067	1,103	1,112
Non-S&E, total	4,546	4,283	4,269	4,256	4,107	4,399	4,441	4,532	4,482	4,695
Health	148	133	180	177	191	198	186	171	198	250
Humanities[1]	1,350	1,296	1,246	1,333	1,258	1,451	1,466	1,573	1,546	1,660
Education	2,321	2,127	2,071	1,986	1,882	2,000	1,962	1,961	1,942	1,934
Professional/other	727	727	772	760	776	750	827	827	796	851
Grand total, all fields	12,810	12,308	12,168	12,343	11,988	12,689	12,676	12,822	12,849	13,037
	U.S. citizens, female									
Science and engineering, total	3,999	4,162	4,165	4,355	4,647	4,892	5,237	5,162	5,502	5,704
Engineering, total	119	142	149	178	249	248	279	283	296	343
Chemical	29	36	44	46	60	54	51	68	59	57
Civil	9	10	9	13	37	29	21	20	30	48
Electrical	20	21	14	28	29	45	44	55	57	64
Mechanical	15	13	10	16	19	23	34	23	33	32
Other engineering	46	62	72	75	104	97	129	117	117	142
Sciences, total	3,880	4,020	4,016	4,177	4,398	4,644	4,958	4,879	5,206	5,361
Physical sciences, total	324	337	362	369	402	422	412	447	446	452
Astronomy	9	6	9	13	11	16	7	13	20	20
Chemistry	261	276	296	305	342	352	336	357	352	344
Physics	53	50	56	44	48	47	66	73	71	86
Other physical sciences	1	5	1	7	1	7	3	4	3	2
Earth, atmospheric, and ocean sciences	87	73	82	109	114	118	148	138	111	125
Mathematics	70	69	65	59	93	82	93	97	124	121
Computer sciences	24	37	50	39	72	80	83	69	82	77
Biological sciences	1,032	1,075	1,077	1,171	1,190	1,232	1,289	1,329	1,448	1,489
Agricultural sciences	120	116	116	119	156	147	128	134	124	132
Psychology	1,409	1,437	1,488	1,478	1,537	1,724	1,847	1,724	1,870	1,915
Social sciences	814	876	776	833	834	839	958	941	1,001	1,050
Non-S&E, total	5,148	5,284	5,243	5,210	5,357	5,847	5,946	6,312	6,413	6,691
Health	379	411	399	461	522	500	559	606	653	678
Humanities[1]	1,144	1,132	1,138	1,159	1,140	1,319	1,370	1,483	1,575	1,649
Education	3,144	3,207	3,132	3,064	3,113	3,362	3,356	3,572	3,493	3,647
Professional/other	481	534	574	526	582	666	661	651	692	717
Grand total, all fields	9,147	9,446	9,408	9,565	10,004	10,739	11,183	11,474	11,915	12,395

See explanatory information, if any, and SOURCE at end of table.

Table 3. Science and engineering (S&E) doctorates awarded, by citizenship status, sex, racial/ethnic group, and major field of study of recipients: 1985-94

Field of study	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
	U.S. citizens, female, American Indian/Alaskan Native									
Science and engineering, total	20	19	21	15	20	17	19	27	18	24
Engineering, total	0	1	0	0	2	0	2	3	0	2
Chemical	0	0	0	0	0	0	1	0	0	0
Civil	0	0	0	0	1	0	0	1	0	0
Electrical	0	0	0	0	0	0	1	1	0	0
Mechanical	0	0	0	0	0	0	0	0	0	0
Other engineering	0	1	0	0	1	0	0	1	0	2
Sciences, total	20	18	21	15	18	17	17	24	18	22
Physical sciences, total	0	2	2	1	0	0	2	2	2	1
Astronomy	0	0	0	0	0	0	0	0	0	0
Chemistry	0	2	2	0	0	0	2	2	1	0
Physics	0	0	0	1	0	0	0	0	1	1
Other physical sciences	0	0	0	0	0	0	0	0	0	0
Earth, atmospheric, and ocean sciences	0	1	0	1	2	1	1	0	0	0
Mathematics	0	1	0	0	0	0	0	1	0	0
Computer sciences	0	0	1	0	1	0	0	0	1	1
Biological sciences	9	6	4	2	3	1	4	5	2	5
Agricultural sciences	0	0	0	2	1	0	0	0	0	0
Psychology	5	5	12	4	8	12	8	9	9	7
Social sciences	6	3	2	5	3	3	2	7	4	8
Non-S&E, total	36	22	32	27	25	27	37	40	42	47
Health	1	6	2	4	3	0	2	2	6	5
Humanities[1]	5	1	4	4	5	2	7	6	3	8
Education	28	10	23	18	15	21	26	30	30	26
Professional/other	2	5	3	1	2	4	2	2	3	8
Grand total, all fields	56	41	53	42	45	44	56	67	60	71
	U.S. citizens, female, Asian									
Science and engineering, total	114	116	124	117	123	129	192	195	233	244
Engineering, total	14	6	11	9	23	20	27	33	24	31
Chemical	5	2	3	3	9	7	7	7	4	7
Civil	0	0	1	0	2	1	1	1	0	0
Electrical	3	1	2	3	5	4	3	12	7	11
Mechanical	1	0	0	0	1	2	3	2	1	5
Other engineering	5	3	5	3	6	6	13	11	12	8
Sciences, total	100	110	113	108	100	109	165	162	209	213
Physical sciences, total	23	20	15	15	13	19	20	35	42	34
Astronomy	0	1	0	0	0	0	0	1	1	0
Chemistry	20	17	13	14	8	13	15	28	37	27
Physics	3	2	2	1	5	6	5	6	4	7
Other physical sciences	0	0	0	0	0	0	0	0	0	0
Earth, atmospheric, and ocean sciences	1	1	1	2	2	1	3	3	2	1
Mathematics	2	2	4	4	1	3	5	3	10	4
Computer sciences	0	0	4	1	4	1	7	3	4	4
Biological sciences	39	52	45	37	47	39	69	62	88	80
Agricultural sciences	1	2	3	4	3	2	3	5	4	2
Psychology	16	17	24	24	18	25	33	28	32	61
Social sciences	18	16	17	21	12	19	25	23	27	27
Non-S&E, total	73	67	49	83	62	85	114	114	105	114
Health	9	7	8	7	5	14	13	23	10	21
Humanities[1]	11	18	13	20	15	12	26	24	36	28
Education	45	34	23	48	34	48	59	57	51	52
Professional/other	8	8	5	8	8	11	16	10	8	13
Grand total, all fields	187	183	173	200	185	214	306	309	338	358

See explanatory information, if any, and SOURCE at end of table.

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Table 3. Science and engineering (S&E) doctorates awarded, by citizenship status, sex, racial/ethnic group, and major field of study of recipients: 1985-94

Field of study	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
	U.S. citizens, female, black									
Science and engineering, total	131	141	122	124	150	137	176	158	196	197
Engineering, total	3	4	1	4	3	5	8	6	11	13
Chemical	2	1	0	1	1	2	1	1	3	4
Civil	0	1	0	0	0	0	2	0	2	2
Electrical	0	0	0	2	0	1	2	2	2	3
Mechanical	0	1	0	0	0	0	1	0	0	1
Other engineering	1	1	1	1	2	2	2	3	4	3
Sciences, total	128	137	121	120	147	132	168	152	185	184
Physical sciences, total	5	4	3	7	7	6	4	5	9	12
Astronomy	0	0	0	0	0	0	0	1	0	0
Chemistry	4	3	2	6	7	6	4	4	8	8
Physics	1	1	1	1	0	0	0	0	0	4
Other physical sciences	0	0	0	0	0	0	0	0	1	0
Earth, atmospheric, and ocean sciences	0	0	1	0	1	2	1	1	0	1
Mathematics	0	3	2	0	2	1	4	0	1	3
Computer sciences	0	0	1	0	1	0	4	1	3	2
Biological sciences	20	19	22	18	23	20	25	22	30	41
Agricultural sciences	1	3	3	4	1	1	1	0	2	3
Psychology	62	66	58	54	61	69	83	74	74	72
Social sciences	40	42	31	37	51	33	46	49	66	50
Non-S&E, total	402	359	329	375	344	410	410	412	472	488
Health	12	14	18	23	20	18	22	24	37	30
Humanities[1]	34	34	37	32	34	34	47	42	38	52
Education	319	280	245	268	261	316	287	317	345	352
Professional/other	37	31	29	52	29	42	54	29	52	54
Grand total, all fields	533	500	451	499	494	547	586	570	668	685
	U.S. citizens, female, Hispanic									
Science and engineering, total	99	102	126	129	133	153	169	170	188	200
Engineering, total	0	3	3	6	6	6	10	11	11	5
Chemical	0	2	1	0	2	0	4	2	3	0
Civil	0	0	0	1	0	1	2	1	2	2
Electrical	0	1	0	2	1	1	0	2	3	0
Mechanical	0	0	0	1	1	1	2	2	0	1
Other engineering	0	0	2	2	2	3	2	4	3	2
Sciences, total	99	99	123	123	127	147	159	159	177	195
Physical sciences, total	6	8	15	13	15	22	10	15	16	17
Astronomy	0	1	0	0	0	0	0	1	0	0
Chemistry	4	6	13	11	15	20	8	11	14	13
Physics	2	1	2	2	0	2	2	3	2	4
Other physical sciences	0	0	0	0	0	0	0	0	0	0
Earth, atmospheric, and ocean sciences	0	1	0	4	2	4	1	4	2	2
Mathematics	2	3	2	0	4	3	3	3	1	3
Computer sciences	2	0	0	0	3	1	1	1	1	0
Biological sciences	21	23	19	22	15	28	35	35	46	49
Agricultural sciences	3	3	4	1	3	3	1	2	5	7
Psychology	39	39	61	53	60	53	66	70	78	86
Social sciences	26	22	22	30	25	33	42	29	28	31
Non-S&E, total	162	168	159	145	141	188	192	198	220	245
Health	7	7	8	5	7	15	8	8	15	17
Humanities[1]	43	34	38	48	38	60	56	47	67	62
Education	98	121	103	86	89	99	112	126	122	150
Professional/other	14	6	10	6	9	14	16	17	16	16
Grand total, all fields	261	270	285	274	274	341	361	368	408	445

See explanatory information, if any, and SOURCE at end of table.

Table 3. Science and engineering (S&E) doctorates awarded, by citizenship status, sex, racial/ethnic group, and major field of study of recipients: 1985-94

Field of study	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
	U.S. citizens, female, Puerto Rican									
Science and engineering, total	26	25	33	38	39	48	47	49	42	59
Engineering, total	0	2	1	2	1	2	2	3	2	0
Chemical	0	2	0	0	0	0	1	0	0	0
Civil	0	0	0	1	0	0	0	0	1	0
Electrical	0	0	0	0	0	1	0	1	1	0
Mechanical	0	0	0	0	1	0	0	1	0	0
Other engineering	0	0	1	1	0	1	1	1	0	0
Sciences, total	26	23	32	36	38	46	45	46	40	59
Physical sciences, total	4	1	9	7	4	10	6	6	5	7
Astronomy	0	0	0	0	0	0	0	0	0	0
Chemistry	3	1	9	6	4	10	5	5	5	6
Physics	1	0	0	1	0	0	1	1	0	1
Other physical sciences	0	0	0	0	0	0	0	0	0	0
Earth, atmospheric, and ocean sciences	0	0	0	0	0	1	0	0	0	0
Mathematics	0	1	2	0	3	0	0	1	0	0
Computer sciences	0	0	0	0	0	0	0	0	1	0
Biological sciences	4	3	7	10	4	10	11	11	11	14
Agricultural sciences	1	1	3	0	2	1	0	0	3	3
Psychology	8	9	7	14	16	15	14	19	11	30
Social sciences	9	8	4	5	9	9	14	9	9	5
Non-S&E, total	55	36	52	48	51	58	60	70	70	75
Health	3	2	3	2	3	6	1	1	3	4
Humanities[1]	11	7	11	14	12	20	19	12	18	22
Education	33	25	33	29	35	30	36	53	46	45
Professional/other	8	2	5	3	1	2	4	4	3	4
Grand total, all fields	81	61	85	86	90	106	107	119	112	134
	U.S. citizens, female, Mexican American									
Science and engineering, total	30	26	27	32	34	35	41	38	42	54
Engineering, total	0	0	1	0	3	2	2	0	1	2
Chemical	0	0	0	0	1	0	1	0	0	0
Civil	0	0	0	0	0	1	0	0	0	0
Electrical	0	0	0	0	1	0	0	0	0	0
Mechanical	0	0	0	0	0	1	1	0	0	0
Other engineering	0	0	1	0	1	0	0	0	1	2
Sciences, total	30	26	26	32	31	33	39	38	41	52
Physical sciences, total	1	3	1	1	2	3	3	2	2	3
Astronomy	0	0	0	0	0	0	0	0	0	0
Chemistry	1	2	0	1	2	3	2	2	1	2
Physics	0	1	1	0	0	0	1	0	1	1
Other physical sciences	0	0	0	0	0	0	0	0	0	0
Earth, atmospheric, and ocean sciences	0	0	0	2	0	1	0	2	0	0
Mathematics	0	1	0	0	0	2	2	0	0	1
Computer sciences	0	0	0	0	0	0	0	0	0	0
Biological sciences	5	6	4	1	3	7	7	11	10	13
Agricultural sciences	1	2	0	1	0	0	0	1	1	1
Psychology	14	9	16	19	20	14	15	17	24	21
Social sciences	9	5	5	8	6	6	12	5	4	13
Non-S&E, total	42	58	44	42	34	35	55	52	69	86
Health	2	1	2	1	2	6	3	5	5	3
Humanities[1]	8	6	4	9	9	8	12	9	16	17
Education	29	49	36	30	22	19	37	32	42	63
Professional/other	3	2	2	2	1	2	3	6	6	3
Grand total, all fields	72	84	71	74	68	70	96	90	111	140

See explanatory information, if any, and SOURCE at end of table.

Table 3. Science and engineering (S&E) doctorates awarded, by citizenship status, sex, racial/ethnic group, and major field of study of recipients: 1985-94

Field of study	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
	U.S. citizens, female, other Hispanic									
Science and engineering, total	43	51	66	59	60	70	81	83	104	87
Engineering, total	0	1	1	4	2	2	6	8	8	3
Chemical	0	0	1	0	1	0	2	2	3	0
Civil	0	0	0	0	0	0	2	1	1	2
Electrical	0	1	0	2	0	0	0	1	2	0
Mechanical	0	0	0	1	0	0	1	1	0	1
Other engineering	0	0	0	1	1	2	1	3	2	0
Sciences, total	43	50	65	55	58	68	75	75	96	84
Physical sciences, total	1	4	5	5	9	9	1	7	9	7
Astronomy	0	1	0	0	0	0	0	1	0	0
Chemistry	0	3	4	4	9	7	1	4	8	5
Physics	1	0	1	1	0	2	0	2	1	2
Other physical sciences	0	0	0	0	0	0	0	0	0	0
Earth, atmospheric, and ocean sciences	0	1	0	2	2	2	1	2	2	2
Mathematics	2	1	0	0	1	1	1	2	1	2
Computer sciences	2	0	0	0	3	1	1	1	0	0
Biological sciences	12	14	8	11	8	11	17	13	25	22
Agricultural sciences	1	0	1	0	1	2	1	1	1	3
Psychology	17	21	38	20	24	24	37	34	43	35
Social sciences	8	9	13	17	10	18	16	15	15	13
Non-S&E, total	65	74	63	55	56	95	77	76	81	84
Health	2	4	3	2	2	3	4	2	7	10
Humanities[1]	24	21	23	25	15	32	25	26	33	23
Education	36	47	34	27	32	50	39	41	34	42
Professional/other	3	2	3	1	7	10	9	7	7	9
Grand total, all fields	108	125	129	114	116	165	158	159	185	171
	U.S. citizens, female, white									
Science and engineering, total	3,557	3,721	3,712	3,915	4,167	4,401	4,601	4,556	4,840	5,004
Engineering, total	97	125	132	155	212	216	221	227	248	291
Chemical	20	29	40	41	48	45	38	56	49	45
Civil	9	8	8	11	32	27	15	17	25	44
Electrical	15	19	12	20	23	39	33	38	45	50
Mechanical	14	12	10	15	17	19	27	19	31	25
Other engineering	39	57	62	68	92	86	108	97	98	127
Sciences, total	3,460	3,596	3,580	3,760	3,955	4,185	4,380	4,329	4,592	4,713
Physical sciences, total	283	294	322	329	365	368	372	382	375	386
Astronomy	8	3	9	12	11	16	6	10	19	19
Chemistry	229	241	261	271	310	307	305	307	291	295
Physics	45	45	51	39	43	39	58	61	63	70
Other physical sciences	1	5	1	7	1	6	3	4	2	2
Earth, atmospheric, and ocean sciences	83	70	80	99	107	109	137	130	107	120
Mathematics	65	60	57	55	83	74	79	88	111	110
Computer sciences	21	37	43	38	61	77	70	64	72	70
Biological sciences	926	960	970	1,080	1,087	1,133	1,140	1,196	1,273	1,305
Agricultural sciences	112	108	104	106	145	141	121	126	112	118
Psychology	1,268	1,294	1,317	1,326	1,373	1,538	1,635	1,520	1,671	1,678
Social sciences	702	773	687	727	734	745	826	823	871	926
Non-S&E, total	4,396	4,600	4,582	4,525	4,737	5,078	5,138	5,497	5,541	5,746
Health	346	375	356	419	484	450	506	543	584	596
Humanities[1]	1,027	1,028	1,023	1,042	1,030	1,198	1,219	1,353	1,423	1,488
Education	2,611	2,719	2,682	2,608	2,693	2,842	2,850	3,016	2,928	3,039
Professional/other	412	478	521	456	530	588	563	585	606	623
Grand total, all fields	7,953	8,321	8,294	8,440	8,904	9,479	9,739	10,053	10,381	10,750

See explanatory information, if any, and SOURCE at end of table.

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Table 3. Science and engineering (S&E) doctorates awarded, by citizenship status, sex, racial/ethnic group, and major field of study of recipients: 1985-94

Field of study	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
	Non-U.S. citizens with permanent visas									
Science and engineering, total	931	994	1,089	1,130	1,124	1,197	1,284	1,382	1,642	3,022
Engineering, total	315	343	355	366	365	389	388	411	470	839
Chemical	52	57	56	50	62	50	51	60	53	87
Civil	40	53	41	46	59	61	40	51	59	89
Electrical	83	83	73	105	99	108	132	122	165	266
Mechanical	58	58	67	71	66	69	62	74	88	179
Other engineering	82	92	118	94	79	101	103	104	105	218
Sciences, total	616	651	734	764	759	808	896	971	1,172	2,183
Physical sciences, total	137	134	147	139	147	172	180	199	237	590
Astronomy	2	3	1	7	4	4	2	6	5	9
Chemistry	87	93	91	73	85	99	110	112	128	324
Physics	46	37	55	55	57	65	68	81	102	255
Other physical sciences	2	1	0	4	1	4	0	0	2	2
Earth, atmospheric, and ocean sciences	30	23	25	27	29	19	26	35	41	106
Mathematics	42	36	51	44	35	47	55	53	94	151
Computer sciences	24	47	32	42	58	55	63	67	84	117
Biological sciences	108	117	160	192	182	189	211	240	303	668
Agricultural sciences	43	47	48	71	45	57	56	62	49	97
Psychology	59	65	59	61	54	73	65	86	90	85
Social sciences	173	182	212	188	209	196	240	229	274	369
Non-S&E, total	393	439	489	492	502	501	572	596	612	719
Health	35	35	40	35	27	35	60	46	60	89
Humanities [1]	133	137	163	150	186	183	219	228	237	277
Education	130	173	172	177	164	153	174	165	175	198
Professional/other	95	94	114	130	125	130	119	157	140	155
Grand total, all fields	1,324	1,433	1,578	1,622	1,626	1,698	1,856	1,978	2,254	3,741
	Non-U.S. citizens with permanent visas, American Indian/Alaskan Native									
Science and engineering, total	0	0	0	0	0	0	0	0	0	0
Engineering, total	0	0	0	0	0	0	0	0	0	0
Chemical	0	0	0	0	0	0	0	0	0	0
Civil	0	0	0	0	0	0	0	0	0	0
Electrical	0	0	0	0	0	0	0	0	0	0
Mechanical	0	0	0	0	0	0	0	0	0	0
Other engineering	0	0	0	0	0	0	0	0	0	0
Sciences, total	0	0	0	0	0	0	0	0	0	0
Physical sciences, total	0	0	0	0	0	0	0	0	0	0
Astronomy	0	0	0	0	0	0	0	0	0	0
Chemistry	0	0	0	0	0	0	0	0	0	0
Physics	0	0	0	0	0	0	0	0	0	0
Other physical sciences	0	0	0	0	0	0	0	0	0	0
Earth, atmospheric, and ocean sciences	0	0	0	0	0	0	0	0	0	0
Mathematics	0	0	0	0	0	0	0	0	0	0
Computer sciences	0	0	0	0	0	0	0	0	0	0
Biological sciences	0	0	0	0	0	0	0	0	0	0
Agricultural sciences	0	0	0	0	0	0	0	0	0	0
Psychology	0	0	0	0	0	0	0	0	0	0
Social sciences	0	0	0	0	0	0	0	0	0	0
Non-S&E, total	0	0	0	0	0	0	2	0	0	0
Health	0	0	0	0	0	0	0	0	0	0
Humanities [1]	0	0	0	0	0	0	0	0	0	0
Education	0	0	0	0	0	0	1	0	0	0
Professional/other	0	0	0	0	0	0	1	0	0	0
Grand total, all fields	0	0	0	0	0	0	2	0	0	0

See explanatory information, if any, and SOURCE at end of table.

Table 3. Science and engineering (S&E) doctorates awarded, by citizenship status, sex, racial/ethnic group, and major field of study of recipients: 1985-94

Field of study	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
	Non-U.S. citizens with permanent visas, Asian									
Science and engineering, total	435	413	478	462	492	520	581	693	898	2,252
Engineering, total	191	182	192	191	187	202	218	237	310	666
Chemical	38	41	36	35	37	25	23	29	36	69
Civil	21	18	20	19	21	20	19	22	31	62
Electrical	48	52	37	58	45	64	73	80	113	208
Mechanical	37	21	36	35	41	42	36	43	59	151
Other engineering	47	50	63	44	43	51	67	63	71	176
Sciences, total	244	231	286	271	305	318	363	456	588	1,586
Physical sciences, total	76	71	76	71	81	78	86	118	144	477
Astronomy	1	1	0	3	2	4	0	2	1	6
Chemistry	55	53	59	37	54	45	59	69	81	261
Physics	18	17	17	30	24	27	27	47	61	208
Other physical sciences	2	0	0	1	1	2	0	0	1	2
Earth, atmospheric, and ocean sciences	11	8	9	6	11	11	10	13	16	82
Mathematics	19	14	23	16	11	16	34	31	51	123
Computer sciences	15	25	16	24	34	38	34	49	50	84
Biological sciences	45	43	64	70	79	84	101	135	180	526
Agricultural sciences	16	10	21	21	16	21	15	24	20	58
Psychology	10	9	9	10	17	9	13	12	21	28
Social sciences	52	51	68	53	56	61	70	74	106	208
Non-S&E, total	118	115	147	159	143	144	160	221	223	339
Health	20	15	16	14	11	13	21	20	28	58
Humanities[1]	20	16	31	28	38	32	37	53	54	90
Education	29	35	54	48	45	37	45	63	58	92
Professional/other	49	49	46	69	49	62	57	85	83	99
Grand total, all fields	553	528	625	621	635	664	741	914	1,121	2,591
	Non-U.S. citizens with permanent visas, black									
Science and engineering, total	80	64	74	86	59	82	95	84	94	109
Engineering, total	15	10	13	12	9	12	12	17	10	10
Chemical	2	3	0	3	3	5	4	5	2	2
Civil	2	2	3	1	3	1	4	3	2	0
Electrical	2	2	3	0	1	1	0	5	2	3
Mechanical	2	0	1	1	0	0	0	2	2	3
Other engineering	7	3	6	7	2	5	4	2	2	2
Sciences, total	65	54	61	74	60	70	83	67	84	99
Physical sciences, total	4	6	4	5	6	11	7	4	12	13
Astronomy	0	0	0	0	0	0	0	0	0	0
Chemistry	4	4	2	4	6	10	4	4	12	11
Physics	0	1	2	1	0	1	3	0	0	2
Other physical sciences	0	1	0	0	0	0	0	0	0	0
Earth, atmospheric, and ocean sciences	2	0	1	1	1	0	1	1	2	3
Mathematics	4	1	1	2	2	0	2	0	3	2
Computer sciences	1	1	0	1	0	0	3	1	1	3
Biological sciences	9	8	15	12	11	14	13	15	11	12
Agricultural sciences	11	9	6	12	8	6	11	8	11	12
Psychology	4	7	5	4	1	4	4	4	2	12
Social sciences	30	22	29	37	31	35	42	34	42	42
Non-S&E, total	51	62	65	66	72	67	60	59	76	69
Health	6	4	6	6	5	7	5	3	7	5
Humanities[1]	8	9	8	9	8	3	8	6	16	12
Education	28	41	34	44	42	40	35	34	41	35
Professional/other	9	8	17	7	17	17	12	16	12	17
Grand total, all fields	131	126	139	152	141	149	155	143	170	178

See explanatory information, if any, and SOURCE at end of table.

Table 3. Science and engineering (S&E) doctorates awarded, by citizenship status, sex, racial/ethnic group, and major field of study of recipients: 1985-94

Field of study	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
	Non-U.S. citizens with permanent visas, Hispanic									
Science and engineering, total	46	66	49	66	69	78	82	80	98	85
Engineering, total	6	10	10	20	14	15	12	14	10	17
Chemical	0	0	4	2	4	1	1	6	0	2
Civil	1	4	0	3	4	3	0	1	5	7
Electrical	3	2	2	4	4	4	4	3	1	5
Mechanical	0	3	1	2	0	2	1	1	2	1
Other engineering	2	1	3	9	2	5	6	3	2	2
Sciences, total	40	56	39	46	55	63	70	66	88	68
Physical sciences, total	4	5	8	5	7	9	11	14	14	15
Astronomy	0	1	0	0	1	0	0	0	1	0
Chemistry	3	1	4	4	3	7	7	8	8	10
Physics	1	3	4	1	3	2	4	6	5	5
Other physical sciences	0	0	0	0	0	0	0	0	0	0
Earth, atmospheric, and ocean sciences	2	0	2	0	3	2	4	3	5	1
Mathematics	5	3	2	1	3	3	3	2	7	1
Computer sciences	1	3	0	0	0	1	1	1	2	2
Biological sciences	10	14	10	15	13	16	16	12	21	20
Agricultural sciences	2	10	3	8	6	9	8	9	6	9
Psychology	5	8	3	4	6	9	9	11	11	5
Social sciences	11	13	11	13	17	14	18	14	22	15
Non-S&E, total	27	41	42	32	43	38	54	50	41	59
Health	1	0	0	2	1	0	4	1	5	5
Humanities[1]	15	23	25	16	23	23	31	30	23	38
Education	9	14	16	7	13	11	14	14	9	14
Professional/other	2	4	1	7	6	4	5	5	4	2
Grand total, all fields	73	107	91	98	112	116	136	130	139	144
	Non-U.S. citizens with permanent visas, white									
Science and engineering, total	345	402	440	452	452	476	484	475	526	534
Engineering, total	91	125	127	124	143	150	130	130	133	134
Chemical	12	11	14	8	17	19	22	17	13	13
Civil	15	28	18	21	28	34	16	24	21	18
Electrical	28	26	27	39	45	37	48	30	46	45
Mechanical	16	29	27	28	23	25	22	26	25	21
Other engineering	20	31	41	28	30	35	22	33	28	37
Sciences, total	254	277	313	328	309	326	354	345	393	400
Physical sciences, total	50	41	54	48	51	69	72	56	63	81
Astronomy	1	1	1	3	1	0	2	4	3	3
Chemistry	24	26	24	22	21	35	38	27	26	40
Physics	25	14	29	21	29	32	32	25	33	38
Other physical sciences	0	0	0	2	0	2	0	0	1	0
Earth, atmospheric, and ocean sciences	15	15	13	18	14	6	11	16	15	18
Mathematics	13	17	24	24	18	26	16	18	31	23
Computer sciences	7	17	14	12	23	14	25	15	31	26
Biological sciences	44	48	62	88	72	66	76	70	90	103
Agricultural sciences	13	14	13	25	10	19	18	18	12	16
Psychology	38	38	40	41	30	49	36	56	56	37
Social sciences	74	87	93	72	91	77	100	96	95	96
Non-S&E, total	189	194	214	222	224	231	276	239	264	245
Health	8	16	17	10	9	14	29	21	18	21
Humanities[1]	87	76	94	96	111	117	136	134	140	133
Education	59	71	62	72	58	58	69	44	67	55
Professional/other	35	31	41	44	46	42	42	40	39	36
Grand total, all fields	534	596	654	674	676	707	760	714	790	779

See explanatory information, if any, and SOURCE at end of table.

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Table 3. Science and engineering (S&E) doctorates awarded, by citizenship status, sex, racial/ethnic group, and major field of study of recipients: 1985-94

Field of study	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
	Non-U.S. citizens with permanent visas, male									
Science and engineering, total	746	789	830	874	850	908	926	967	1,121	2,231
Engineering, total	298	323	330	348	339	361	351	366	418	734
Chemical	50	51	48	43	53	42	42	46	48	66
Civil	38	48	39	44	56	56	36	48	57	82
Electrical	81	79	72	100	92	106	128	110	142	242
Mechanical	55	58	66	70	66	68	59	72	85	157
Other engineering	74	87	105	91	72	89	86	90	86	187
Sciences, total	448	466	500	526	511	547	575	601	703	1,497
Physical sciences, total	114	95	110	98	112	124	138	132	162	418
Astronomy	2	2	1	6	2	2	2	4	2	8
Chemistry	70	60	60	50	62	68	78	68	79	205
Physics	40	32	49	39	47	50	58	60	79	204
Other physical sciences	2	1	0	3	1	4	0	0	2	1
Earth, atmospheric, and ocean sciences	26	20	18	24	23	19	17	26	33	87
Mathematics	30	32	39	33	27	36	36	33	54	123
Computer sciences	24	41	28	35	46	45	52	53	57	100
Biological sciences	62	76	93	111	96	110	111	131	168	417
Agricultural sciences	37	40	38	62	37	45	47	46	39	69
Psychology	29	32	18	27	28	25	22	30	21	26
Social sciences	126	130	156	136	142	143	152	150	169	257
Non-S&E, total	253	279	287	290	289	282	298	324	345	403
Health	25	22	24	20	18	18	31	23	34	45
Humanities[1]	67	70	80	65	83	80	97	103	115	139
Education	80	106	94	102	89	86	92	84	94	106
Professional/other	81	81	89	103	99	98	78	114	102	113
Grand total, all fields	999	1,068	1,117	1,164	1,139	1,190	1,224	1,291	1,466	2,634
	Non-U.S. citizens with permanent visas, female									
Science and engineering, total	185	205	259	256	274	289	358	415	521	791
Engineering, total	17	20	25	18	26	28	37	45	52	105
Chemical	2	6	8	7	9	8	9	14	5	21
Civil	2	5	2	2	3	5	4	3	2	7
Electrical	2	4	1	5	7	2	4	12	23	24
Mechanical	3	0	1	1	0	1	3	2	3	22
Other engineering	8	5	13	3	7	12	17	14	19	31
Sciences, total	168	185	234	238	248	261	321	370	469	686
Physical sciences, total	23	39	37	41	35	48	42	67	75	172
Astronomy	0	1	0	1	2	2	0	2	3	1
Chemistry	17	33	31	23	23	31	32	44	49	119
Physics	6	5	6	16	10	15	10	21	23	51
Other physical sciences	0	0	0	1	0	0	0	0	0	1
Earth, atmospheric, and ocean sciences	4	3	7	3	6	0	9	9	8	19
Mathematics	12	4	12	11	8	11	19	20	40	28
Computer sciences	0	6	4	7	12	10	11	14	27	17
Biological sciences	46	41	67	81	86	79	100	109	135	251
Agricultural sciences	6	7	10	9	8	12	9	16	10	28
Psychology	30	33	41	34	26	48	43	56	69	59
Social sciences	47	52	56	52	67	53	88	79	105	112
Non-S&E, total	140	160	202	202	213	219	274	272	267	316
Health	10	13	16	15	9	17	29	23	26	44
Humanities[1]	66	67	83	85	103	103	122	125	122	138
Education	50	67	78	75	75	67	82	81	81	92
Professional/other	14	13	25	27	26	32	41	43	38	42
Grand total, all fields	325	365	461	458	487	508	632	687	788	1,107

See explanatory information, if any, and SOURCE at end of table.

Table 3. Science and engineering (S&E) doctorates awarded, by citizenship status, sex, racial/ethnic group, and major field of study of recipients: 1985-94

Field of study	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
	Non-U.S. citizens with temporary visas									
Science and engineering, total	4,048	4,160	4,468	4,936	5,391	6,571	7,642	8,092	8,110	7,510
Engineering, total	1,419	1,372	1,532	1,721	1,940	2,277	2,634	2,743	2,782	2,656
Chemical	199	199	216	236	236	250	281	339	336	336
Civil	207	199	233	266	262	284	353	357	380	385
Electrical	311	320	310	419	498	602	690	725	702	737
Mechanical	239	231	303	333	358	465	493	538	553	459
Other engineering	463	423	470	467	586	676	817	784	811	739
Sciences, total	2,629	2,788	2,936	3,215	3,451	4,294	5,008	5,349	5,328	4,854
Physical sciences, total	624	767	801	870	890	1,073	1,257	1,346	1,263	1,108
Astronomy	14	17	23	20	26	30	37	28	34	32
Chemistry	330	393	399	442	461	530	689	729	675	597
Physics	276	348	376	403	401	507	525	581	550	472
Other physical sciences	4	9	3	5	2	6	6	8	4	7
Earth, atmospheric, and ocean sciences	115	97	122	132	122	171	185	236	235	196
Mathematics	238	272	302	305	346	424	506	511	517	437
Computer sciences	89	123	143	176	178	271	340	365	348	344
Biological sciences	424	391	492	557	608	853	1,059	1,159	1,246	1,056
Agricultural sciences	355	320	289	345	355	440	435	472	447	453
Psychology	81	81	[illegible]	84	106	117	133	156	148	151
Social sciences	703	737	70[illegible]	746	846	945	1,093	1,104	1,124	1,109
Non-S&E, total	1,180	1,116	1,142	1,258	1,255	1,522	1,667	1,859	1,811	1,883
Health	99	99	96	118	134	166	171	226	214	229
Humanities[1]	206	249	252	290	283	354	443	494	461	531
Education	570	471	419	480	450	501	501	552	544	537
Professional/other	305	297	375	370	388	501	552	587	592	586
Grand total, all fields	5,228	5,276	5,610	6,194	6,646	8,093	9,309	9,951	9,921	9,393
	Non-U.S. citizens with temporary visas, American Indian/Alaskan Native									
Science and engineering, total	0	1	1	0	0	0	0	1	1	2
Engineering, total	0	0	1	0	0	0	0	0	0	1
Chemical	0	0	0	0	0	0	0	0	0	0
Civil	0	0	0	0	0	0	0	0	0	0
Electrical	0	0	1	0	0	0	0	0	0	0
Mechanical	0	0	0	0	0	0	0	0	0	0
Other engineering	0	0	0	0	0	0	0	0	0	1
Sciences, total	0	1	0	0	0	0	0	1	1	1
Physical sciences, total	0	0	0	0	0	0	0	0	0	0
Astronomy	0	0	0	0	0	0	0	0	0	0
Chemistry	0	0	0	0	0	0	0	0	0	0
Physics	0	0	0	0	0	0	0	0	0	0
Other physical sciences	0	0	0	0	0	0	0	0	0	0
Earth, atmospheric, and ocean sciences	0	0	0	0	0	0	0	0	0	0
Mathematics	0	0	0	0	0	0	0	0	0	1
Computer sciences	0	0	0	0	0	0	0	0	0	0
Biological sciences	0	1	0	0	0	0	0	1	0	0
Agricultural sciences	0	0	0	0	0	0	0	0	1	0
Psychology	0	0	0	0	0	0	0	0	0	0
Social sciences	0	0	0	0	0	0	0	0	0	0
Non-S&E, total	0	0	0	0	0	1	0	1	0	1
Health	0	0	0	0	0	0	0	0	0	0
Humanities[1]	0	0	0	0	0	0	0	1	0	1
Education	0	0	0	0	0	1	0	0	0	0
Professional/other	0	0	0	0	0	0	0	0	0	0
Grand total, all fields	0	1	1	0	0	1	0	2	1	3

See explanatory information, if any, and SOURCE at end of table.

Table 3. Science and engineering (S&E) doctorates awarded, by citizenship status, sex, racial/ethnic group, and major field of study of recipients: 1985-94

Field of study	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
	Non-U.S. citizens with temporary visas, Asian									
Science and engineering, total	2,102	2,202	2,458	2,896	3,254	4,160	5,016	5,494	5,577	4,785
Engineering, total	851	838	958	1,124	1,264	1,497	1,847	1,992	2,056	1,841
Chemical	127	133	155	167	148	165	209	243	248	222
Civil	109	106	118	147	137	163	199	202	241	225
Electrical	185	180	187	279	327	396	501	516	515	520
Mechanical	157	139	202	244	242	341	383	425	436	359
Other engineering	273	280	296	287	410	432	555	606	616	515
Sciences, total	1,251	1,364	1,500	1,772	1,990	2,663	3,169	3,502	3,521	2,944
Physical sciences, total	373	484	506	594	642	792	910	998	934	773
Astronomy	9	4	13	6	13	15	19	17	19	15
Chemistry	202	262	267	328	362	418	538	569	533	452
Physics	158	210	225	257	266	353	351	409	380	303
Other physical sciences	4	8	1	3	1	6	2	3	2	3
Earth, atmospheric, and ocean sciences	53	42	56	67	56	95	96	141	142	92
Mathematics	107	125	131	150	187	254	321	330	320	239
Computer sciences	49	68	86	114	120	192	239	253	255	244
Biological sciences	219	196	260	323	352	558	707	838	907	676
Agricultural sciences	124	122	118	131	149	209	224	248	228	212
Psychology	19	20	15	27	35	48	47	62	71	70
Social sciences	307	307	328	366	449	515	625	632	664	638
Non-S&E, total	424	443	475	620	649	770	930	1,010	1,020	1,011
Health	43	43	37	53	71	76	94	125	136	130
Humanities[1]	52	74	62	101	93	103	162	170	175	174
Education	182	161	177	228	229	255	292	318	310	312
Professional/other	147	165	199	238	256	336	382	397	399	395
Grand total, all fields	2,526	2,645	2,933	3,516	3,903	4,930	5,946	6,504	6,597	5,796
	Non-U.S. citizens with temporary visas, black									
Science and engineering, total	223	197	183	191	171	195	189	195	210	267
Engineering, total	38	25	31	36	23	35	25	24	31	34
Chemical	3	1	3	4	3	4	3	1	6	8
Civil	8	9	15	5	5	10	7	5	10	9
Electrical	6	4	4	4	6	8	4	5	3	6
Mechanical	8	6	2	4	3	3	2	6	4	2
Other engineering	13	5	7	19	6	10	9	7	8	9
Sciences, total	185	172	152	155	148	160	164	171	179	233
Physical sciences, total	19	19	17	17	13	6	28	23	15	25
Astronomy	0	0	0	0	0	0	1	0	0	0
Chemistry	19	17	14	12	12	4	21	20	13	18
Physics	0	2	3	5	1	2	6	3	2	6
Other physical sciences	0	0	0	0	0	0	0	0	0	1
Earth, atmospheric, and ocean sciences	2	3	1	4	3	3	2	9	3	3
Mathematics	4	6	7	4	5	9	4	8	9	11
Computer sciences	0	3	1	2	3	1	5	1	3	1
Biological sciences	26	32	19	32	24	26	27	24	28	43
Agricultural sciences	47	33	26	31	33	39	32	43	42	68
Psychology	3	3	4	6	4	6	6	3	6	6
Social sciences	84	73	77	59	63	70	60	60	73	76
Non-S&E, total	172	116	122	100	102	95	104	115	110	117
Health	8	13	7	9	12	4	15	17	13	12
Humanities[1]	24	16	32	14	9	12	17	25	31	22
Education	106	72	55	60	56	56	52	48	49	58
Professional/other	34	15	28	17	25	23	20	25	17	25
Grand total, all fields	395	313	305	291	273	290	293	310	320	384

See explanatory information, if any, and SOURCE at end of table.

Table 3. Science and engineering (S&E) doctorates awarded, by citizenship status, sex, racial/ethnic group, and major field of study of recipients: 1985-94

Field of study	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
	Non-U.S. citizens with temporary visas, Hispanic									
Science and engineering, total	284	290	289	292	311	301	359	367	361	385
Engineering, total	64	60	63	61	70	74	68	66	78	94
Chemical	14	10	8	15	12	9	10	14	16	19
Civil	9	13	15	18	11	15	13	14	13	17
Electrical	10	6	6	6	10	10	18	15	15	14
Mechanical	5	9	8	6	10	14	5	6	11	10
Other engineering	26	22	26	16	27	26	22	17	23	34
Sciences, total	220	230	226	231	241	227	291	301	283	291
Physical sciences, total	45	48	40	34	28	33	37	42	33	27
Astronomy	0	3	1	1	1	3	2	1	3	2
Chemistry	25	22	20	17	15	17	20	21	15	19
Physics	20	23	18	16	12	13	15	19	15	6
Other physical sciences	0	0	1	0	0	0	0	1	0	0
Earth, atmospheric, and ocean sciences	8	2	16	12	14	8	10	14	21	22
Mathematics	19	26	23	24	19	20	33	27	25	23
Computer sciences	2	5	6	5	6	9	13	7	6	9
Biological sciences	40	36	53	45	56	50	62	68	59	68
Agricultural sciences	61	42	44	64	55	54	58	47	62	60
Psychology	4	11	9	5	9	8	13	10	8	9
Social sciences	41	60	35	42	54	45	65	86	69	73
Non-S&E, total	76	82	49	57	52	85	86	114	92	116
Health	8	8	7	3	4	9	7	12	11	9
Humanities[1]	17	20	20	26	18	43	46	51	42	65
Education	46	43	10	21	22	18	23	33	19	30
Professional/other	5	11	12	7	8	15	10	18	20	12
Grand total, all fields	360	372	338	349	363	386	445	481	453	501
	Non-U.S. citizens with temporary visas, white									
Science and engineering, total	1,150	1,143	1,176	1,273	1,380	1,502	1,642	1,696	1,760	1,846
Engineering, total	361	348	375	411	491	549	531	556	559	598
Chemical	41	34	41	35	57	58	48	68	62	73
Civil	58	57	71	88	96	82	113	121	107	121
Electrical	92	109	90	109	133	154	139	153	149	175
Mechanical	54	62	70	69	88	90	67	85	91	75
Other engineering	116	86	103	110	117	165	164	129	150	154
Sciences, total	789	795	801	862	889	953	1,111	1,140	1,201	1,248
Physical sciences, total	153	171	187	184	172	174	235	239	251	261
Astronomy	4	9	7	10	11	11	13	10	12	15
Chemistry	68	68	77	74	57	62	87	94	100	101
Physics	81	93	102	99	103	101	132	132	137	142
Other physical sciences	0	1	1	1	1	0	3	3	2	3
Earth, atmospheric, and ocean sciences	45	41	39	40	43	54	61	57	61	71
Mathematics	97	101	102	107	121	119	112	129	150	152
Computer sciences	31	39	40	44	42	59	78	88	75	85
Biological sciences	114	98	122	129	150	174	216	193	217	234
Agricultural sciences	96	90	69	91	83	92	86	104	101	97
Psychology	47	42	51	37	56	53	60	73	59	62
Social sciences	206	213	191	230	222	228	263	257	287	286
Non-S&E, total	417	363	388	409	374	446	458	539	533	572
Health	35	29	37	43	38	62	49	53	51	56
Humanities[1]	102	115	121	137	150	162	192	230	195	249
Education	180	135	128	140	107	130	112	124	142	123
Professional/other	100	84	102	89	79	92	105	132	145	144
Grand total, all fields	1,567	1,506	1,564	1,682	1,754	1,948	2,100	2,235	2,293	2,418

See explanatory information, if any, and SOURCE at end of table.

Table 3. Science and engineering (S&E) doctorates awarded, by citizenship status, sex, racial/ethnic group, and major field of study of recipients: 1985-94

Field of study	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
	Non-U.S. citizens with temporary visas, male									
Science and engineering, total	3,542	3,619	3,904	4,254	4,609	5,590	6,413	6,741	6,655	6,191
Engineering, total	1,363	1,323	1,478	1,651	1,850	2,157	2,485	2,574	2,621	2,478
Chemical	190	185	208	226	225	234	259	308	309	301
Civil	198	195	227	252	250	271	337	330	358	360
Electrical	301	308	299	408	469	573	659	679	659	681
Mechanical	232	228	298	324	349	452	473	518	534	445
Other engineering	442	407	446	441	557	627	757	739	761	691
Sciences, total	2,179	2,296	2,426	2,603	2,759	3,433	3,928	4,167	4,034	3,713
Physical sciences, total	529	653	706	743	743	895	1,041	1,098	1,015	909
Astronomy	13	15	19	18	22	28	30	24	32	28
Chemistry	265	321	340	366	355	421	547	556	503	440
Physics	247	308	344	354	365	441	460	510	477	434
Other physical sciences	4	9	3	5	1	5	4	8	3	7
Earth, atmospheric, and ocean sciences	102	84	109	119	109	153	165	198	202	157
Mathematics	216	234	260	262	299	363	420	427	422	353
Computer sciences	81	119	138	168	160	256	317	329	322	303
Biological sciences	293	280	333	385	400	582	694	787	809	703
Agricultural sciences	315	278	248	295	300	359	366	391	357	366
Psychology	53	47	48	48	60	62	77	81	64	71
Social sciences	590	601	584	583	688	763	848	856	843	851
Non-S&E, total	853	795	818	879	833	1,042	1,103	1,220	1,199	1,126
Health	63	73	61	75	87	101	101	159	138	114
Humanities[1]	130	149	169	180	171	211	254	279	272	296
Education	403	320	270	307	262	306	287	298	304	268
Professional/other	257	253	318	317	313	424	461	484	485	448
Grand total, all fields	4,395	4,414	4,722	5,133	5,442	6,632	7,516	7,961	7,854	7,317
	Non-U.S. citizens with temporary visas, female									
Science and engineering, total	506	541	564	682	782	981	1,229	1,351	1,455	1,319
Engineering, total	56	49	54	70	90	120	149	169	161	178
Chemical	9	14	8	10	11	16	22	31	27	35
Civil	9	4	6	14	12	13	16	27	22	25
Electrical	10	12	11	11	29	29	31	46	43	56
Mechanical	7	3	5	9	9	13	20	20	19	14
Other engineering	21	16	24	26	29	49	60	45	50	48
Sciences, total	450	492	510	612	692	861	1,080	1,182	1,294	1,141
Physical sciences, total	95	114	95	127	147	178	216	248	248	199
Astronomy	1	2	4	2	4	2	7	4	2	4
Chemistry	65	72	59	76	106	109	142	173	172	157
Physics	29	40	32	49	36	66	65	71	73	38
Other physical sciences	0	0	0	0	1	1	2	0	1	0
Earth, atmospheric, and ocean sciences	13	13	13	13	13	18	20	38	33	39
Mathematics	22	38	42	43	47	61	86	84	95	84
Computer sciences	8	4	5	8	18	15	23	36	26	41
Biological sciences	131	111	159	172	208	271	365	372	437	353
Agricultural sciences	40	42	41	50	55	81	69	81	90	87
Psychology	28	34	37	36	46	55	56	75	84	80
Social sciences	113	136	118	163	158	182	245	248	281	258
Non-S&E, total	327	321	324	379	422	480	564	639	612	757
Health	36	26	35	43	47	65	70	67	76	115
Humanities[1]	78	100	83	110	112	143	189	215	189	235
Education	167	151	149	173	188	195	214	254	240	269
Professional/other	48	44	57	53	75	77	91	103	107	138
Grand total, all fields	833	862	888	1,061	1,204	1,461	1,793	1,990	2,067	2,076

[1] Categories differ from those published by other Federal sponsors and the National Research Council in that linguistics, history of science, American studies, and archaeology are included not in humanities but in social science.

NOTE: Details may not add to totals because of persons with unknown race/ethnicity.

SOURCE: National Science Foundation/SRS, Survey of Earned Doctorates

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Table 4. Science and engineering (S&E) doctorates awarded, by major field and citizenship status of recipients: 1985-94

Field of study	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
	Total									
Science and engineering, total	18,936	19,437	19,894	20,933	21,731	22,867	24,019	24,673	25,444	26,211
Engineering, total	3,166	3,376	3,712	4,187	4,543	4,894	5,215	5,438	5,698	5,826
Aeronautical/astronautical	124	118	142	150	178	192	207	234	228	230
Chemical	504	531	584	685	712	658	691	725	737	725
Civil	391	429	477	531	538	553	575	594	624	684
Electrical	716	806	779	1,010	1,137	1,276	1,405	1,483	1,542	1,675
Industrial	92	101	120	127	162	151	165	196	236	228
Materials/metallurgical	303	305	392	374	380	440	489	485	535	539
Mechanical	513	536	657	715	760	884	875	987	1,031	1,015
Other engineering	523	550	561	595	676	740	808	734	765	730
Sciences, total	15,770	16,061	16,182	16,746	17,188	17,973	18,804	19,235	19,746	20,385
Physical sciences, total	2,934	3,120	3,238	3,350	3,261	3,524	3,625	3,780	3,700	3,975
Astronomy	100	109	100	130	113	128	125	134	145	143
Chemistry	1,836	1,903	1,975	2,015	1,970	2,100	2,193	2,213	2,138	2,254
Physics	980	1,078	1,137	1,172	1,161	1,265	1,286	1,403	1,399	1,549
Other physical sciences	18	30	26	33	17	31	21	30	18	29
Earth, atmospheric, and ocean sciences	599	559	602	695	723	738	815	794	771	824
Mathematics	688	729	740	749	859	892	1,039	1,058	1,146	1,118
Computer sciences	310	399	450	515	612	705	800	869	880	904
Biological sciences	3,793	3,807	3,839	4,112	4,115	4,327	4,646	4,798	5,091	5,197
Agricultural sciences	1,111	997	976	1,015	1,086	1,174	1,073	1,063	968	1,078
Psychology	3,118	3,126	3,173	3,074	3,208	3,281	3,250	3,263	3,421	3,389
Social sciences	3,217	3,324	3,164	3,236	3,324	3,332	3,556	3,610	3,769	3,900
Non-S&E, total	12,362	12,462	12,473	12,566	12,593	13,200	13,499	14,177	14,311	14,800
Health	729	770	800	882	974	956	1,042	1,112	1,197	1,297
Humanities[1]	3,119	3,152	3,170	3,275	3,243	3,535	3,719	4,035	4,086	4,374
Education	6,733	6,646	6,450	6,359	6,278	6,511	6,442	6,640	6,650	6,683
Professional/other	1,781	1,894	2,053	2,050	2,098	2,198	2,296	2,390	2,378	2,446
Grand total, all fields	31,298	31,899	32,367	33,499	34,324	36,067	37,518	38,850	39,755	41,011
	Citizenship known									
Science and engineering, total	18,113	18,176	18,523	19,435	19,982	21,934	23,550	24,032	24,679	25,681
Engineering, total	3,013	3,098	3,445	3,867	4,169	4,623	5,108	5,263	5,478	5,706
Aeronautical/astronautical	121	105	131	129	166	176	205	215	219	226
Chemical	491	497	566	644	680	642	680	717	713	716
Civil	377	391	436	499	509	525	566	572	607	677
Electrical	664	730	703	922	1,037	1,201	1,376	1,444	1,496	1,636
Industrial	86	99	113	117	150	148	162	192	230	228
Materials/metallurgical	292	289	373	352	347	424	481	469	516	530
Mechanical	490	498	611	660	683	833	852	964	987	994
Other engineering	492	489	512	544	597	674	786	690	710	699
Sciences, total	15,100	15,078	15,078	15,568	15,813	17,311	18,442	18,769	19,201	19,975
Physical sciences, total	2,811	2,933	3,043	3,128	3,021	3,414	3,556	3,702	3,593	3,893
Astronomy	98	108	96	124	108	126	123	134	145	143
Chemistry	1,762	1,806	1,871	1,893	1,844	2,027	2,149	2,169	2,075	2,210
Physics	938	991	1,058	1,084	1,055	1,232	1,264	1,371	1,356	1,516
Other physical sciences	13	28	18	27	14	29	20	28	17	24
Earth, atmospheric, and ocean sciences	580	524	557	652	669	706	803	777	738	808
Mathematics	656	674	698	691	774	846	1,024	1,018	1,107	1,084
Computer sciences	302	372	418	502	574	674	791	854	857	887
Biological sciences	3,660	3,632	3,633	3,880	3,907	4,232	4,580	4,726	4,996	5,139
Agricultural sciences	1,081	946	921	955	1,006	1,127	1,055	1,045	953	1,069
Psychology	2,945	2,913	2,891	2,813	2,843	3,109	3,151	3,142	3,309	3,296
Social sciences	3,045	3,084	2,917	2,947	3,019	3,203	3,482	3,505	3,648	3,799
Non-S&E, total	11,809	11,616	11,648	11,671	11,690	12,762	13,175	13,871	13,904	14,558
Health	684	702	742	810	890	922	1,011	1,081	1,153	1,279
Humanities[1]	2,974	2,914	2,924	3,050	3,000	3,436	3,637	3,933	3,972	4,292
Education	6,476	6,270	6,082	5,955	5,859	6,289	6,280	6,534	6,474	6,577
Professional/other	1,675	1,730	1,900	1,856	1,941	2,115	2,247	2,323	2,305	2,410
Grand total, all fields	29,922	29,792	30,171	31,106	31,672	34,696	36,725	37,903	38,583	40,239

See explanatory information, if any, and SOURCE at end of table.

Table 4. Science and engineering (S&E) doctorates awarded, by major field and citizenship status of recipients: 1985-94

Field of study	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
	U.S. citizens									
Science and engineering, total	13,134	13,022	12,966	13,369	13,467	14,166	14,624	14,558	14,927	15,149
Engineering, total	1,279	1,383	1,558	1,780	1,864	1,957	2,086	2,109	2,226	2,211
Aeronautical/astronautical	53	40	64	67	74	82	103	95	114	110
Chemical	240	241	294	358	382	342	348	318	324	293
Civil	130	139	162	187	188	180	173	164	168	203
Electrical	270	327	320	398	440	491	554	597	629	633
Industrial	29	33	44	40	51	56	50	54	89	89
Materials/metallurgical	144	119	176	172	173	190	211	202	228	218
Mechanical	193	209	241	256	259	299	297	352	346	356
Other engineering	220	275	257	302	297	317	350	327	328	309
Sciences, total	11,855	11,639	11,408	11,589	11,603	12,209	12,538	12,449	12,701	12,938
Physical sciences, total	2,050	2,032	2,095	2,119	1,984	2,169	2,119	2,157	2,093	2,195
Astronomy	82	88	72	97	78	92	84	100	106	102
Chemistry	1,345	1,320	1,381	1,378	1,298	1,398	1,350	1,328	1,272	1,289
Physics	616	606	627	626	597	660	671	709	704	789
Other physical sciences	7	18	15	18	11	19	14	20	11	15
Earth, atmospheric, and ocean sciences	435	404	410	493	518	516	592	506	462	506
Mathematics	376	366	345	342	393	375	463	454	496	496
Computer sciences	189	202	243	284	338	348	388	422	425	426
Biological sciences	3,148	3,124	2,981	3,131	3,117	3,190	3,310	3,327	3,447	3,415
Agricultural sciences	683	579	584	539	606	630	564	511	457	519
Psychology	2,805	2,767	2,747	2,668	2,683	2,919	2,953	2,900	3,071	3,060
Social sciences	2,169	2,165	2,003	2,013	1,964	2,062	2,149	2,172	2,250	2,321
Non-S&E, total	10,236	10,061	10,017	9,921	9,933	10,739	10,936	11,416	11,481	11,956
Health	550	568	606	657	729	721	780	809	879	961
Humanities[1]	2,635	2,528	2,509	2,610	2,531	2,899	2,975	3,211	3,274	3,484
Education	5,776	5,626	5,491	5,298	5,245	5,635	5,605	5,817	5,755	5,842
Professional/other	1,275	1,339	1,411	1,356	1,428	1,484	1,576	1,579	1,573	1,669
Grand total, all fields	23,370	23,083	22,983	23,290	23,400	24,905	25,560	25,974	26,408	27,105
	Non-U.S. citizens									
Science and engineering, total	4,979	5,154	5,557	6,066	6,515	7,768	8,926	9,474	9,752	10,532
Engineering, total	1,734	1,715	1,887	2,087	2,305	2,666	3,022	3,154	3,252	3,495
Aeronautical/astronautical	68	65	67	62	92	94	102	120	105	116
Chemical	251	256	272	286	298	300	332	399	389	423
Civil	247	252	274	312	321	345	393	408	439	474
Electrical	394	403	383	524	597	710	822	847	867	1,003
Industrial	57	66	69	77	99	92	112	138	141	139
Materials/metallurgical	148	170	197	180	174	234	270	267	288	312
Mechanical	297	289	370	404	424	534	555	612	641	638
Other engineering	272	214	255	242	300	357	436	363	382	390
Sciences, total	3,245	3,439	3,670	3,979	4,210	5,102	5,904	6,320	6,500	7,037
Physical sciences, total	761	901	948	1,009	1,037	1,245	1,437	1,545	1,500	1,698
Astronomy	16	20	24	27	30	34	39	34	39	41
Chemistry	417	486	490	515	546	629	799	841	803	921
Physics	322	385	431	458	458	572	593	662	652	727
Other physical sciences	6	10	3	9	3	10	6	8	6	9
Earth, atmospheric, and ocean sciences	145	120	147	159	151	190	211	271	276	302
Mathematics	280	308	353	349	381	471	561	564	611	588
Computer sciences	113	170	175	218	236	326	403	432	432	461
Biological sciences	532	508	652	749	790	1,042	1,270	1,399	1,549	1,724
Agricultural sciences	398	367	337	416	400	497	491	534	496	550
Psychology	140	146	144	145	160	190	198	242	238	236
Social sciences	876	919	914	934	1,055	1,141	1,333	1,333	1,398	1,478
Non-S&E, total	1,573	1,555	1,631	1,750	1,757	2,023	2,239	2,455	2,423	2,602
Health	134	134	136	153	161	201	231	272	274	318
Humanities[1]	339	386	415	440	469	537	662	722	698	808
Education	700	644	591	657	614	654	675	717	719	735
Professional/other	400	391	489	500	513	631	671	744	732	741
Grand total, all fields	6,552	6,709	7,188	7,816	8,272	9,791	11,165	11,929	12,175	13,134

See explanatory information, if any, and SOURCE at end of table.

Table 4. Science and engineering (S&E) doctorates awarded, by major field and citizenship status of recipients: 1985-94

Field of study	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
	Non-U.S. citizens with permanent visas									
Science and engineering, total	931	994	1,089	1,130	1,124	1,197	1,284	1,382	1,642	3,022
Engineering, total	315	343	355	366	365	389	388	411	470	839
Aeronautical/astronautical	17	5	8	14	8	8	11	8	6	20
Chemical	52	57	56	50	62	50	51	60	53	87
Civil	40	53	41	46	59	61	40	51	59	89
Electrical	83	83	73	105	99	108	132	122	165	266
Industrial	9	14	13	11	8	13	18	20	16	30
Materials/metallurgical	21	33	38	27	21	26	29	34	39	79
Mechanical	58	58	67	71	66	69	62	74	88	179
Other engineering	35	40	59	42	42	54	45	42	44	89
Sciences, total	616	651	734	764	759	808	896	971	1,172	2,183
Physical sciences, total	137	134	147	139	147	172	180	199	237	590
Astronomy	2	3	1	7	4	4	2	6	5	9
Chemistry	87	93	91	73	85	99	110	112	128	324
Physics	46	37	55	55	57	65	68	81	102	255
Other physical sciences	2	1	0	4	1	4	0	0	2	2
Earth, atmospheric, and ocean sciences	30	23	25	27	29	19	26	35	41	106
Mathematics	42	36	51	44	35	47	55	53	94	151
Computer sciences	24	47	32	42	58	55	63	67	84	117
Biological sciences	108	117	160	192	182	189	211	240	303	668
Agricultural sciences	43	47	48	71	45	57	56	62	49	97
Psychology	59	65	59	61	54	73	65	86	90	85
Social sciences	173	182	212	188	209	196	240	229	274	369
Non-S&E, total	393	439	489	492	502	501	572	596	612	719
Health	35	35	40	35	27	35	60	46	60	89
Humanities[1]	133	137	163	150	186	183	219	228	237	277
Education	130	173	172	177	164	153	174	165	175	198
Professional/other	95	94	114	130	125	130	119	157	140	155
Grand total, all fields	1,324	1,433	1,578	1,622	1,626	1,698	1,856	1,978	2,254	3,741
	Non-U.S. citizens with temporary visas									
Science and engineering, total	4,048	4,160	4,468	4,936	5,391	6,571	7,642	8,092	8,110	7,510
Engineering, total	1,419	1,372	1,532	1,721	1,940	2,277	2,634	2,743	2,782	2,656
Aeronautical/astronautical	51	60	59	48	84	86	91	112	99	96
Chemical	199	199	216	236	236	250	281	339	336	336
Civil	207	199	233	266	262	284	353	357	380	385
Electrical	311	320	310	419	498	602	690	725	702	737
Industrial	48	52	56	66	91	79	94	118	125	109
Materials/metallurgical	127	137	159	153	153	208	241	233	249	233
Mechanical	239	231	303	333	358	465	493	538	553	459
Other engineering	237	174	196	200	258	303	391	321	338	301
Sciences, total	2,629	2,788	2,936	3,215	3,451	4,294	5,008	5,349	5,328	4,854
Physical sciences, total	624	767	801	870	890	1,073	1,257	1,346	1,263	1,108
Astronomy	14	17	23	20	26	30	37	28	34	32
Chemistry	330	393	399	442	461	530	689	729	675	597
Physics	276	348	376	403	401	507	525	581	550	472
Other physical sciences	4	9	3	5	2	6	6	8	4	7
Earth, atmospheric, and ocean sciences	115	97	122	132	122	171	185	236	235	196
Mathematics	238	272	302	305	346	424	506	511	517	437
Computer sciences	89	123	143	176	178	271	340	365	348	344
Biological sciences	424	391	492	557	608	853	1,059	1,159	1,246	1,056
Agricultural sciences	355	320	289	345	355	440	435	472	447	453
Psychology	81	81	85	84	106	117	133	156	148	151
Social sciences	703	737	702	746	846	945	1,093	1,104	1,124	1,109
Non-S&E, total	1,180	1,116	1,142	1,258	1,255	1,522	1,667	1,859	1,811	1,883
Health	99	99	96	118	134	166	171	226	214	229
Humanities[1]	206	249	252	290	283	354	443	494	461	531
Education	570	471	419	480	450	501	501	552	544	537
Professional/other	305	297	375	370	388	501	552	587	592	586
Grand total, all fields	5,228	5,276	5,610	6,194	6,646	8,093	9,309	9,951	9,921	9,393

See explanatory information, if any, and SOURCE at end of table.

Table 4. Science and engineering (S&E) doctorates awarded, by major field and citizenship status of recipients: 1985-94

Field of study	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
	Citizenship unknown									
Science and engineering, total	823	1,261	1,371	1,498	1,749	933	469	641	765	530
Engineering, total	153	278	267	320	374	271	107	175	220	120
Aeronautical/astronautical	3	13	11	21	12	16	2	19	9	4
Chemical	13	34	18	41	32	16	11	8	24	9
Civil	14	38	41	32	29	28	9	22	17	7
Electrical	52	76	76	88	100	75	29	39	46	39
Industrial	6	2	7	10	12	3	3	4	6	0
Materials/metallurgical	11	16	19	22	33	16	8	16	19	9
Mechanical	23	38	46	55	77	51	23	23	44	21
Other engineering	31	61	49	51	79	66	22	44	55	31
Sciences, total	670	983	1,104	1,178	1,375	662	362	466	545	410
Physical sciences, total	123	187	195	222	240	110	69	78	107	82
Astronomy	2	1	4	6	5	2	2	0	0	0
Chemistry	74	97	104	122	126	73	44	44	63	44
Physics	42	87	79	88	106	33	22	32	43	33
Other physical sciences	5	2	8	6	3	2	1	2	1	5
Earth, atmospheric, and ocean sciences	19	35	45	43	54	32	12	17	33	16
Mathematics	32	55	42	58	85	46	15	40	39	34
Computer sciences	8	27	32	13	38	31	9	15	23	17
Biological sciences	113	175	206	232	208	95	66	72	95	58
Agricultural sciences	30	51	55	60	80	47	18	18	15	9
Psychology	173	213	282	261	365	172	99	121	112	93
Social sciences	172	240	247	289	305	129	74	105	121	101
Non-S&E, total	553	846	825	895	903	438	324	306	407	242
Health	45	68	58	72	84	34	31	31	44	18
Humanities[1]	145	238	246	225	243	99	82	102	114	82
Education	257	376	368	404	419	222	162	106	176	106
Professional/other	106	164	153	194	157	83	49	67	73	36
Grand total, all fields	1,376	2,107	2,196	2,393	2,652	1,371	793	947	1,172	772

[1] Categories differ from those published by other Federal sponsors and the National Research Council in that linguistics, history of science, American studies, and archaeology are included not in humanities but in social science.

SOURCE: National Science Foundation/SRS, Survey of Earned Doctorates

Table 4a. Percentage distribution of science and engineering (S&E) doctorates awarded, by major field and citizenship status of recipients: 1985-94

Field of study	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
	Total									
Science and engineering, total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Engineering, total	16.7	17.4	18.7	20.0	20.9	21.4	21.7	22.0	22.4	22.2
Aeronautical/astronautical	.7	.6	.7	.7	.8	.8	.9	.9	.9	.9
Chemical	2.7	2.7	2.9	3.3	3.3	2.9	2.9	2.9	2.9	2.8
Civil	2.1	2.2	2.4	2.5	2.5	2.4	2.4	2.4	2.5	2.6
Electrical	3.8	4.1	3.9	4.8	5.2	5.6	5.8	6.0	6.1	6.4
Industrial	.5	.5	.6	.6	.7	.7	.7	.8	.9	.9
Materials/metallurgical	1.6	1.6	2.0	1.8	1.7	1.9	2.0	2.0	2.1	2.1
Mechanical	2.7	2.8	3.3	3.4	3.5	3.9	3.6	4.0	4.1	3.9
Other engineering	2.8	2.8	2.8	2.8	3.1	3.2	3.4	3.0	3.0	2.8
Sciences, total	83.3	82.6	81.3	80.0	79.1	78.6	78.3	78.0	77.6	77.8
Physical sciences, total	15.5	16.1	16.3	16.0	15.0	15.4	15.1	15.3	14.5	15.2
Astronomy	.5	.6	.5	.6	.5	.6	.5	.5	.6	.5
Chemistry	9.7	9.8	9.9	9.6	9.1	9.2	9.1	9.0	8.4	8.6
Physics	5.2	5.5	5.7	5.6	5.3	5.5	5.4	5.7	5.5	5.9
Other physical sciences	.1	.2	.1	.2	.1	.1	.1	.1	.1	.1
Earth, atmospheric, and ocean sciences	3.2	2.9	3.0	3.3	3.3	3.2	3.4	3.2	3.0	3.1
Mathematics	3.6	3.8	3.7	3.6	4.0	3.9	4.3	4.3	4.5	4.3
Computer sciences	1.6	2.1	2.3	2.5	2.8	3.1	3.3	3.5	3.5	3.4
Biological sciences	20.0	19.6	19.3	19.6	18.9	18.9	19.3	19.4	20.0	19.8
Agricultural sciences	5.9	5.1	4.9	4.8	5.0	5.1	4.5	4.3	3.8	4.1
Psychology	16.5	16.1	15.9	14.7	14.8	14.3	13.5	13.2	13.4	12.9
Social sciences	17.0	17.1	15.9	15.5	15.3	14.6	14.8	14.6	14.8	14.9
	Citizenship known									
Science and engineering, total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Engineering, total	16.6	17.0	18.6	19.9	20.9	21.1	21.7	21.9	22.2	22.2
Aeronautical/astronautical	.7	.6	.7	.7	.8	.8	.9	.9	.9	.9
Chemical	2.7	2.7	3.1	3.3	3.4	2.9	2.9	3.0	2.9	2.8
Civil	2.1	2.2	2.4	2.6	2.5	2.4	2.4	2.4	2.5	2.6
Electrical	3.7	4.0	3.8	4.7	5.2	5.5	5.8	6.0	6.1	6.4
Industrial	.5	.5	.6	.6	.8	.7	.7	.8	.9	.9
Materials/metallurgical	1.6	1.6	2.0	1.8	1.7	1.9	2.0	2.0	2.1	2.1
Mechanical	2.7	2.7	3.3	3.4	3.4	3.8	3.6	4.0	4.0	3.9
Other engineering	2.7	2.7	2.8	2.8	3.0	3.1	3.3	2.9	2.9	2.7
Sciences, total	83.4	83.0	81.4	80.1	79.1	78.9	78.3	78.1	77.8	77.8
Physical sciences, total	15.5	16.1	16.4	16.1	15.1	15.6	15.1	15.4	14.6	15.2
Astronomy	.5	.6	.5	.6	.5	.6	.5	.6	.6	.6
Chemistry	9.7	9.9	10.1	9.7	9.2	9.2	9.1	9.0	8.4	8.6
Physics	5.2	5.5	5.7	5.6	5.3	5.6	5.4	5.7	5.5	5.9
Other physical sciences	.1	.2	.1	.1	.1	.1	.1	.1	.1	.1
Earth, atmospheric, and ocean sciences	3.2	2.9	3.0	3.4	3.3	3.2	3.4	3.2	3.0	3.1
Mathematics	3.6	3.7	3.8	3.6	3.9	3.9	4.3	4.2	4.5	4.2
Computer sciences	1.7	2.0	2.3	2.6	2.9	3.1	3.4	3.6	3.5	3.5
Biological sciences	20.3	20.0	19.6	20.0	19.6	19.3	19.4	19.7	20.2	20.0
Agricultural sciences	6.0	5.2	5.0	4.9	5.0	5.1	4.5	4.3	3.9	4.2
Psychology	16.3	16.0	15.6	14.5	14.2	14.2	13.4	13.1	13.4	12.8
Social sciences	16.8	17.0	15.7	15.2	15.1	14.6	14.8	14.6	14.8	14.8

See explanatory information, if any, and SOURCE at end of table.

Table 4a. Percentage distribution of science and engineering (S&E) doctorates awarded, by major field and citizenship status of recipients: 1985-94

Field of study	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
	U.S. citizens									
Science and engineering, total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Engineering, total	9.7	10.6	12.0	13.3	13.8	13.8	14.3	14.5	14.9	14.6
Aeronautical/astronautical	.4	.3	.5	.5	.5	.6	.7	.7	.8	.7
Chemical	1.8	1.9	2.3	2.7	2.8	2.4	2.4	2.2	2.2	1.9
Civil	1.0	1.1	1.2	1.4	1.4	1.3	1.2	1.1	1.1	1.3
Electrical	2.1	2.5	2.5	3.0	3.3	3.5	3.8	4.1	4.2	4.2
Industrial	.2	.3	.3	.3	.4	.4	.3	.4	.6	.6
Materials/metallurgical	1.1	.9	1.4	1.3	1.3	1.3	1.4	1.4	1.5	1.4
Mechanical	1.5	1.6	1.9	1.9	1.9	2.1	2.0	2.4	2.3	2.3
Other engineering	1.7	2.1	2.0	2.3	2.2	2.2	2.4	2.2	2.2	2.0
Sciences, total	90.3	89.4	88.0	86.7	86.2	86.2	85.7	85.5	85.1	85.4
Physical sciences, total	15.6	15.6	16.2	15.9	14.7	15.3	14.5	14.8	14.0	14.5
Astronomy	.6	.7	.6	.7	.6	.6	.6	.7	.7	.7
Chemistry	10.2	10.1	10.7	10.3	9.6	9.9	9.2	9.1	8.5	8.5
Physics	4.7	4.7	4.8	4.7	4.4	4.7	4.6	4.9	4.7	5.2
Other physical sciences	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
Earth, atmospheric, and ocean sciences	3.3	3.1	3.2	3.7	3.8	3.6	4.0	3.5	3.1	3.3
Mathematics	2.9	2.8	2.7	2.6	2.9	2.6	3.2	3.1	3.3	3.3
Computer sciences	1.4	1.6	1.9	2.1	2.5	2.5	2.7	2.9	2.8	2.8
Biological sciences	24.0	24.0	23.0	23.4	23.1	22.5	22.6	22.9	23.1	22.5
Agricultural sciences	5.2	4.4	4.5	4.0	4.5	4.4	3.9	3.5	3.1	3.4
Psychology	21.4	21.2	21.2	20.0	19.9	20.6	20.2	19.9	20.6	20.2
Social sciences	16.5	16.6	15.4	15.1	14.6	14.6	14.7	14.9	15.1	15.3
	Non-U.S. citizens									
Science and engineering, total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Engineering, total	34.8	33.3	34.0	34.4	35.4	34.3	33.9	33.3	33.3	33.2
Aeronautical/astronautical	1.4	1.3	1.2	1.0	1.4	1.2	1.1	1.3	1.1	1.1
Chemical	5.0	5.0	4.9	4.7	4.6	3.9	3.7	4.2	4.0	4.0
Civil	5.0	4.9	4.9	5.1	4.9	4.4	4.4	4.3	4.5	4.5
Electrical	7.9	7.8	6.9	8.6	9.2	9.1	9.2	8.9	8.9	9.5
Industrial	1.1	1.3	1.2	1.3	1.5	1.2	1.3	1.5	1.4	1.3
Materials/metallurgical	3.0	3.3	3.5	3.0	2.7	3.0	3.0	2.8	3.0	3.0
Mechanical	6.0	5.6	6.7	6.7	6.5	6.9	6.2	6.5	6.6	6.1
Other engineering	5.5	4.2	4.6	4.0	4.6	4.6	4.9	3.8	3.9	3.7
Sciences, total	65.2	66.7	66.0	65.6	64.6	65.7	66.1	66.7	66.7	66.8
Physical sciences, total	15.3	17.5	17.1	16.6	15.9	16.0	16.1	16.3	15.4	16.1
Astronomy	.3	.4	.4	.4	.5	.4	.4	.4	.4	.4
Chemistry	8.4	9.4	8.8	8.5	8.4	8.1	9.0	8.9	8.2	8.7
Physics	6.5	7.5	7.8	7.6	7.0	7.4	6.6	7.0	6.7	6.9
Other physical sciences	.1	.2	.1	.1	.0	.1	.1	.1	.1	.1
Earth, atmospheric, and ocean sciences	2.9	2.3	2.6	2.6	2.3	2.4	2.4	2.9	2.8	2.9
Mathematics	5.6	6.0	6.4	5.8	5.8	6.1	6.3	6.0	6.3	5.6
Computer sciences	2.3	3.3	3.1	3.6	3.6	4.2	4.5	4.6	4.4	4.4
Biological sciences	10.7	9.9	11.7	12.3	12.1	13.4	14.2	14.8	15.9	16.4
Agricultural sciences	8.0	7.1	6.1	6.9	6.1	6.4	5.5	5.6	5.1	5.2
Psychology	2.8	2.8	2.6	2.4	2.5	2.4	2.2	2.6	2.4	2.2
Social sciences	17.6	17.8	16.4	15.4	16.2	14.7	14.9	14.1	14.3	14.0

See explanatory information, if any, and SOURCE at end of table.

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Table 4a. Percentage distribution of science and engineering (S&E) doctorates awarded, by major field and citizenship status of recipients: 1985-94

Field of study	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
	Non-U.S. citizens with permanent visas									
Science and engineering, total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Engineering, total	33.8	34.5	32.6	32.4	32.5	32.5	30.2	29.7	28.6	27.8
Aeronautical/astronautical	1.8	.5	.7	1.2	.7	.7	.9	.6	.4	.7
Chemical	5.6	5.7	5.1	4.4	5.5	4.2	4.0	4.3	3.2	2.9
Civil	4.3	5.3	3.8	4.1	5.2	5.1	3.1	3.7	3.6	2.9
Electrical	8.9	8.4	6.7	9.3	8.8	9.0	10.3	8.8	10.0	8.8
Industrial	1.0	1.4	1.2	1.0	.7	1.1	1.4	1.4	1.0	1.0
Materials/metallurgical	2.3	3.3	3.5	2.4	1.9	2.2	2.3	2.5	2.4	2.6
Mechanical	6.2	5.8	6.2	6.3	5.9	5.8	4.8	5.4	5.4	5.9
Other engineering	3.8	4.0	5.4	3.7	3.7	4.5	3.5	3.0	2.7	2.9
Sciences, total	66.2	65.5	67.4	67.6	67.5	67.5	69.8	70.3	71.4	72.2
Physical sciences, total	14.7	13.5	13.5	12.3	13.1	14.4	14.0	14.4	14.4	19.5
Astronomy	.2	.3	.1	.6	.4	.3	.2	.4	.3	.3
Chemistry	9.3	9.4	8.4	6.5	7.6	8.3	8.6	8.1	7.8	10.7
Physics	4.9	3.7	5.1	4.9	5.1	5.4	5.3	5.9	6.2	8.4
Other physical sciences	.2	.1	.0	.4	.1	.3	.0	.0	.1	.1
Earth, atmospheric, and ocean sciences	3.2	2.3	2.3	2.4	2.6	1.6	2.0	2.5	2.5	3.5
Mathematics	4.5	3.6	4.7	3.9	3.1	3.9	4.3	3.8	5.7	5.0
Computer sciences	2.6	4.7	2.9	3.7	5.2	4.6	4.9	4.8	5.1	3.9
Biological sciences	11.6	11.8	14.7	17.0	16.2	15.8	16.4	17.4	18.5	22.1
Agricultural sciences	4.6	4.7	4.4	6.3	4.0	4.8	4.4	4.5	3.0	3.2
Psychology	6.3	6.5	5.4	5.4	4.8	6.1	5.1	6.2	5.5	2.8
Social sciences	18.6	18.3	19.5	16.6	18.6	16.4	18.7	16.6	16.7	12.2
	Non-U.S. citizens with temporary visas									
Science and engineering, total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Engineering, total	35.1	33.0	34.3	34.9	36.0	34.7	34.5	33.9	34.3	35.4
Aeronautical/astronautical	1.3	1.4	1.3	1.0	1.6	1.3	1.2	1.4	1.2	1.3
Chemical	4.9	4.8	4.8	4.8	4.4	3.8	3.7	4.2	4.1	4.5
Civil	5.1	4.8	5.2	5.4	4.9	4.3	4.6	4.4	4.7	5.1
Electrical	7.7	7.7	6.9	8.5	9.2	9.2	9.0	9.0	8.7	9.8
Industrial	1.2	1.2	1.3	1.3	1.7	1.2	1.2	1.5	1.5	1.5
Materials/metallurgical	3.1	3.3	3.6	3.1	2.8	3.2	3.2	2.9	3.1	3.1
Mechanical	5.9	5.6	6.8	6.7	6.6	7.1	6.5	6.6	6.8	6.1
Other engineering	5.9	4.2	4.4	4.1	4.8	4.6	5.1	4.0	4.2	4.0
Sciences, total	64.9	67.0	65.7	65.1	64.0	65.3	65.5	66.1	65.7	64.6
Physical sciences, total	15.4	18.4	17.9	17.6	16.5	16.3	16.4	16.6	15.6	14.8
Astronomy	.3	.4	.5	.4	.5	.5	.5	.3	.4	.4
Chemistry	8.2	9.4	8.9	9.0	8.6	8.1	9.0	9.0	8.3	7.9
Physics	6.8	8.4	8.4	8.2	7.4	7.7	6.9	7.2	6.8	6.3
Other physical sciences	.1	.2	.1	.1	.0	.1	.1	.1	.0	.1
Earth, atmospheric, and ocean sciences	2.8	2.3	2.7	2.7	2.3	2.6	2.4	2.9	2.9	2.6
Mathematics	5.9	6.5	6.8	6.2	6.4	6.5	6.6	6.3	6.4	5.8
Computer sciences	2.2	3.0	3.2	3.6	3.3	4.1	4.4	4.5	4.3	4.6
Biological sciences	10.5	9.4	11.0	11.3	11.3	13.0	13.9	14.3	15.4	14.1
Agricultural sciences	8.8	7.7	6.5	7.0	6.6	6.7	5.7	5.8	5.5	6.0
Psychology	2.0	1.9	1.9	1.7	2.0	1.8	1.7	1.9	1.8	2.0
Social sciences	17.4	17.7	15.7	15.1	15.7	14.4	14.3	13.6	13.9	14.8

See explanatory information, if any, and SOURCE at end of table.

Table 4a. Percentage distribution of science and engineering (S&E) doctorates awarded, by major field and citizenship status of recipients: 1985-94

Field of study	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
	Citizenship unknown									
Science and engineering, total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Engineering, total	18.6	22.0	19.5	21.4	21.4	29.0	22.8	27.3	28.8	22.6
Aeronautical/astronautical	.4	1.0	.8	1.4	.7	1.7	.4	3.0	1.2	.8
Chemical	1.6	2.7	1.3	2.7	1.8	1.7	2.3	1.2	3.1	1.7
Civil	1.7	3.0	3.0	2.1	1.7	3.0	1.9	3.4	2.2	1.3
Electrical	6.3	6.0	5.5	5.9	5.7	8.0	6.2	6.1	6.0	7.4
Industrial	.7	.2	.5	.7	.7	.3	.6	.6	.8	.0
Materials/metallurgical	1.3	1.3	1.4	1.5	1.9	1.7	1.7	2.5	2.5	1.7
Mechanical	2.8	3.0	3.4	3.7	4.4	5.5	4.9	3.6	5.8	4.0
Other engineering	3.8	4.8	3.6	3.4	4.5	7.1	4.7	6.9	7.2	5.8
Sciences, total	81.4	78.0	80.5	78.6	78.6	71.0	77.2	72.7	71.2	77.4
Physical sciences, total	14.9	14.8	14.2	14.8	13.7	11.8	14.7	12.2	14.0	15.5
Astronomy	.2	.1	.3	.4	.3	.2	.4	.0	.0	.0
Chemistry	9.0	7.7	7.6	8.1	7.2	7.8	9.4	6.9	8.2	8.3
Physics	5.1	6.9	5.8	5.9	6.1	3.5	4.7	5.0	5.6	6.2
Other physical sciences	.6	.2	.6	.4	.2	.2	.2	.3	.1	.9
Earth, atmospheric, and ocean sciences	2.3	2.8	3.3	2.9	3.1	3.4	2.6	2.7	4.3	3.0
Mathematics	3.9	4.4	3.1	3.9	4.9	4.9	3.2	6.2	5.1	6.4
Computer sciences	1.0	2.1	2.3	.9	2.2	3.3	1.9	2.3	3.0	3.2
Biological sciences	13.7	13.9	15.0	15.5	11.9	10.2	14.1	11.2	12.4	10.9
Agricultural sciences	3.6	4.0	4.0	4.0	4.6	5.0	3.8	2.8	2.0	1.7
Psychology	21.0	16.9	20.6	17.4	20.9	18.4	21.1	18.9	14.6	17.5
Social sciences	20.9	19.0	18.0	19.3	17.4	13.8	15.8	16.4	15.8	19.1

SOURCE: National Science Foundation/SRS, Survey of Earned Doctorates

Table 5. Non-U.S. citizens awarded science and engineering (S&E) doctorates, by country of citizenship, visa type, and year of doctorate: 1985-94

Country of citizenship	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
	Total non-U.S. citizens, S&E									
Total foreign citizenship	4,979	5,154	5,557	6,066	6,515	7,768	8,926	9,474	9,752	10,532
North America, total	307	329	318	355	403	446	524	515	506	546
Canada	154	178	181	203	220	253	297	304	285	275
Caribbean	32	29	23	28	29	36	53	44	38	61
Central America	20	25	28	32	34	53	46	52	44	69
Mexico	101	97	86	92	120	104	128	115	139	141
South America, total	256	301	311	294	297	343	387	394	394	408
Argentina	32	40	28	38	43	65	62	86	53	56
Brazil	84	97	112	94	100	100	119	133	151	157
Chile	42	44	45	45	47	50	54	48	52	42
Colombia	22	24	27	46	27	40	49	37	35	48
South America, other	76	96	99	71	80	88	103	90	103	105
Europe, total	493	563	625	691	709	801	972	950	1,104	1,148
Belgium	19	20	16	21	15	31	43	42	24	21
England, United Kingdom	103	78	96	116	96	100	132	137	154	127
France	28	34	48	53	51	65	67	77	93	96
Germany	49	62	74	78	102	123	118	124	164	196
Europe, other	294	369	391	423	445	482	612	570	669	708
East Asia, total	1,558	1,670	1,970	2,242	2,563	3,604	4,487	4,864	5,010	5,481
Taiwan	745	708	787	787	857	1,012	1,127	1,242	1,212	1,302
China, People's Republic of	137	199	296	480	620	1,150	1,793	2,045	2,227	2,529
Hong Kong	94	73	87	81	93	94	121	109	109	95
Japan	97	111	83	104	106	147	125	132	132	182
Korea	325	402	549	621	753	979	1,114	1,126	1,124	1,149
Thailand	98	109	95	98	76	111	93	87	77	97
East Asia, other	62	68	73	71	58	111	114	123	129	127
West Asia, total	1,193	1,208	1,231	1,233	1,308	1,654	1,670	1,891	1,901	2,076
India	458	469	503	520	536	711	752	861	932	1,064
Iran	233	214	182	173	198	258	227	200	203	174
Iraq	42	27	44	36	24	27	24	34	17	22
Israel	71	82	67	66	69	79	89	87	89	108
Lebanon	26	29	43	39	51	45	55	62	50	73
Saudi Arabia	58	49	50	52	61	63	67	76	46	74
Turkey	84	84	86	81	78	106	100	132	136	144
West Asia, other	221	254	256	266	291	365	356	439	428	417
Pacific/Australasia, total	148	151	137	156	166	175	216	220	227	229
Australia	39	34	42	39	41	46	35	40	47	54
Indonesia	42	41	43	43	52	53	69	78	78	83
New Zealand	19	17	14	17	27	16	23	16	24	15
Philippines	46	59	36	56	45	59	89	83	74	75
Pacific/Australasia, other	2	0	2	1	1	1	0	3	4	2
Africa, total	504	451	408	450	446	539	500	510	475	583
Egypt	107	101	98	115	109	160	112	101	88	104
Nigeria	118	81	89	87	59	83	83	68	56	60
Africa, other	279	269	221	248	278	296	305	341	331	419
Country unknown	520	481	557	645	623	206	170	130	135	61

See explanatory information, if any, and SOURCE at end of table.

Table 5. Non-U.S. citizens awarded science and engineering (S&E) doctorates, by country of citizenship, visa type, and year of doctorate: 1985-94

Country of citizenship	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
	Total non-U.S. citizens, engineering									
Total foreign citizenship	1,734	1,715	1,887	2,087	2,305	2,666	3,022	3,154	3,252	3,495
North America, total	56	49	62	63	76	84	84	73	82	90
Canada	22	18	29	28	38	41	54	46	42	36
Caribbean	7	6	6	2	5	7	3	5	4	14
Central America	3	5	6	6	5	11	5	6	9	10
Mexico	24	20	21	27	28	25	22	16	27	30
South America, total	53	63	79	69	73	84	86	87	97	112
Argentina	11	10	9	6	6	12	12	14	10	7
Brazil	15	17	38	25	30	31	34	31	46	50
Chile	6	8	10	9	9	11	8	10	5	8
Colombia	4	4	7	9	5	8	11	9	8	12
South America, other	17	24	15	20	23	22	21	23	28	35
Europe, total	111	148	152	171	198	205	200	202	244	257
Belgium	9	4	6	6	5	12	9	10	7	7
England, United Kingdom	6	12	9	11	14	14	14	17	18	14
France	11	13	16	22	18	27	19	25	32	32
Germany	7	10	7	11	17	15	8	18	23	29
Europe, other	78	109	114	121	144	137	150	132	164	175
East Asia, total	666	682	803	889	988	1,266	1,630	1,701	1,732	1,890
Taiwan	387	351	398	400	427	476	597	637	591	671
China, People's Republic of	48	56	85	133	159	328	477	508	543	657
Hong Kong	28	27	22	33	38	30	30	37	32	14
Japan	25	28	15	24	19	17	29	25	23	46
Korea	133	175	238	257	308	360	435	437	484	430
Thailand	25	26	20	24	16	21	20	21	18	34
East Asia, other	20	19	25	18	21	34	42	36	41	38
West Asia, total	514	470	477	532	577	740	768	863	889	908
India	212	204	204	255	251	314	357	405	448	480
Iran	116	100	88	81	110	139	123	110	95	92
Iraq	6	4	10	8	9	14	11	14	6	9
Israel	23	26	20	25	19	22	27	26	23	17
Lebanon	11	11	27	18	25	35	38	37	27	45
Saudi Arabia	24	14	16	14	26	22	26	31	19	27
Turkey	56	49	43	42	52	59	64	81	74	64
West Asia, other	66	62	69	89	85	135	122	159	197	174
Pacific/Australasia, total	28	21	24	24	26	25	45	48	43	50
Australia	4	6	5	2	2	3	7	11	6	11
Indonesia	15	9	13	11	12	14	19	24	29	28
New Zealand	4	1	2	4	3	2	2	1	0	1
Philippines	5	5	4	7	9	6	17	11	7	9
Pacific/Australasia, other	0	0	0	0	0	0	0	1	1	1
Africa, total	137	118	107	138	140	187	155	138	122	168
Egypt	48	53	40	47	49	82	57	46	48	63
Nigeria	29	15	16	21	11	23	20	11	13	6
Africa, other	60	50	51	70	80	82	78	81	61	99
Country unknown	169	164	183	201	227	75	54	42	43	20

See explanatory information, if any, and SOURCE at end of table.

Table 5. Non-U.S. citizens awarded science and engineering (S&E) doctorates, by country of citizenship, visa type, and year of doctorate: 1985-94

Country of citizenship	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
	Total non-U.S. citizens, sciences									
Total foreign citizenship	3,245	3,439	3,670	3,979	4,210	5,102	5,904	6,320	6,500	7,037
North America, total	251	280	256	292	327	362	440	442	424	456
Canada	132	160	152	175	182	212	243	258	243	239
Caribbean	25	23	17	26	24	29	50	39	34	47
Central America	17	20	22	26	29	42	41	46	35	59
Mexico	77	77	65	65	92	79	106	99	112	111
South America, total	203	238	232	225	224	259	301	307	297	296
Argentina	21	30	19	32	37	53	50	72	43	49
Brazil	69	80	74	69	70	69	85	102	105	107
Chile	36	36	35	36	38	39	46	38	47	34
Colombia	18	20	20	37	22	32	38	28	27	36
South America, other	59	72	84	51	57	66	82	67	75	70
Europe, total	382	415	473	520	511	596	772	748	860	891
Belgium	10	16	10	15	10	19	34	32	17	14
England, United Kingdom	97	66	87	105	82	86	118	120	136	113
France	17	21	32	31	33	38	48	52	61	64
Germany	42	52	67	67	85	108	110	106	141	167
Europe, other	216	260	277	302	301	345	462	438	505	533
East Asia, total	892	988	1,167	1,353	1,575	2,338	2,857	3,163	3,278	3,591
Taiwan	358	357	389	387	430	536	530	605	621	631
China, People's Republic of	89	143	211	347	461	822	1,316	1,537	1,684	1,872
Hong Kong	66	46	65	48	55	64	91	72	77	81
Japan	72	83	68	80	87	130	96	107	109	136
Korea	192	227	311	364	445	619	679	689	640	719
Thailand	73	83	75	74	60	90	73	66	59	63
East Asia, other	42	49	48	53	37	77	72	87	88	89
West Asia, total	679	738	754	701	731	914	902	1,028	1,012	1,168
India	246	265	299	265	285	397	395	456	484	584
Iran	117	114	94	92	88	119	104	90	108	82
Iraq	36	23	34	28	15	13	13	20	11	13
Israel	48	56	47	41	50	57	62	61	66	91
Lebanon	15	18	16	21	26	10	17	25	23	28
Saudi Arabia	34	35	34	38	35	41	41	45	27	47
Turkey	28	35	43	39	26	47	36	51	62	80
West Asia, other	155	192	187	177	206	230	234	280	231	243
Pacific/Australasia, total	120	130	113	132	140	150	171	172	184	179
Australia	35	28	37	37	39	43	28	29	41	43
Indonesia	27	32	30	32	40	39	50	54	49	55
New Zealand	15	16	12	13	24	14	21	15	24	14
Philippines	41	54	32	49	36	53	72	72	67	66
Pacific/Australasia, other	2	0	2	1	1	1	0	2	3	1
Africa, total	367	333	301	312	306	352	345	372	353	415
Egypt	59	48	58	68	60	78	55	55	40	41
Nigeria	89	66	73	66	48	60	63	57	43	54
Africa, other	219	219	170	178	198	214	227	260	270	320
Country unknown	351	317	374	444	396	131	116	88	92	41

See explanatory information, if any, and SOURCE at end of table.

Table 5. Non-U.S. citizens awarded science and engineering (S&E) doctorates, by country of citizenship, visa type, and year of doctorate: 1985-94

Country of citizenship	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
	Permanent visas, S&E									
Total foreign citizenship	931	994	1,089	1,130	1,124	1,197	1,284	1,382	1,642	3,022
North America, total	59	81	62	87	88	99	125	118	120	119
Canada	29	49	40	53	55	55	75	76	71	58
Caribbean	18	14	6	15	8	16	18	16	15	28
Central America	2	7	6	4	9	11	11	8	6	14
Mexico	10	11	10	15	16	17	21	18	28	19
South America, total	26	48	44	48	41	67	62	74	63	64
Argentina	2	6	4	8	4	11	16	17	17	13
Brazil	4	5	9	5	9	13	8	21	11	16
Chile	6	11	7	5	6	7	6	6	7	4
Colombia	4	4	5	14	7	11	11	9	5	13
South America, other	10	22	19	16	15	25	21	21	23	18
Europe, total	132	144	151	171	159	179	211	210	258	275
Belgium	3	6	2	4	3	6	8	8	8	4
England, United Kingdom	43	32	31	46	36	38	52	58	47	56
France	7	6	11	11	14	15	12	10	19	16
Germany	19	22	29	22	24	38	25	39	45	62
Europe, other	60	78	78	88	82	82	114	95	139	137
East Asia, total	255	244	260	250	264	323	407	485	663	2,000
Taiwan	158	144	151	136	142	147	160	172	155	178
China, People's Republic of	6	7	21	26	36	54	100	162	352	1,641
Hong Kong	17	14	19	15	15	12	16	28	20	20
Japan	8	11	10	10	13	23	20	18	20	30
Korea	47	46	36	49	52	70	91	82	91	99
Thailand	6	11	13	5	4	2	8	9	11	11
East Asia, other	13	11	10	9	2	15	12	14	14	21
West Asia, total	205	227	262	244	279	346	287	340	359	377
India	74	70	87	84	94	119	108	148	142	173
Iran	72	77	79	77	93	125	83	82	100	65
Iraq	3	2	8	8	2	3	3	8	4	7
Israel	10	16	20	16	20	11	18	15	22	42
Lebanon	7	8	15	10	14	18	10	6	11	12
Saudi Arabia	0	4	3	4	6	6	2	7	4	7
Turkey	12	21	12	15	11	17	11	20	18	15
West Asia, other	27	29	38	30	39	47	52	54	58	56
Pacific/Australasia, total	16	21	27	29	19	25	34	23	35	40
Australia	7	12	13	11	8	12	9	9	10	13
Indonesia	1	1	5	5	5	3	9	5	6	13
New Zealand	1	1	4	6	1	4	5	1	4	5
Philippines	7	7	4	7	5	6	11	7	14	8
Pacific/Australasia, other	0	0	1	0	0	0	0	1	1	1
Africa, total	79	63	69	81	80	92	103	95	101	123
Egypt	15	13	9	18	13	14	13	9	9	12
Nigeria	31	20	26	25	20	30	35	34	31	33
Africa, other	33	30	34	38	47	48	55	52	61	78
Country unknown	159	166	214	220	194	66	55	37	43	24

See explanatory information, if any, and SOURCE at end of table.

Table 5. Non-U.S. citizens awarded science and engineering (S&E) doctorates, by country of citizenship, visa type, and year of doctorate: 1985-94

Country of citizenship	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
	Permanent visas, engineering									
Total foreign citizenship	315	343	355	366	365	389	388	411	470	839
North America, total	8	6	8	16	12	20	17	13	16	14
Canada	2	2	3	8	9	9	14	8	9	6
Caribbean	3	1	1	1	0	4	0	2	2	4
Central America	0	2	1	2	0	3	2	2	1	2
Mexico	3	1	3	5	3	4	1	1	4	2
South America, total	3	8	11	12	7	12	12	14	8	13
Argentina	0	0	1	0	0	2	5	4	2	1
Brazil	0	2	5	0	1	2	2	2	1	2
Chile	1	1	2	1	1	0	0	1	0	1
Colombia	0	0	0	5	2	1	1	2	1	4
South America, other	2	5	3	6	3	7	4	5	4	5
Europe, total	26	39	32	28	30	31	33	33	42	49
Belgium	1	2	0	2	0	1	1	2	2	1
England, United Kingdom	3	3	4	5	5	5	3	8	4	7
France	1	2	3	2	2	6	4	3	4	5
Germany	1	5	2	1	3	4	0	5	3	11
Europe, other	20	27	23	18	20	15	25	15	29	25
East Asia, total	120	116	115	112	105	128	166	163	221	577
Taiwan	88	78	77	71	67	69	88	80	73	89
China, People's Republic of	1	2	8	10	9	19	25	39	88	427
Hong Kong	4	6	9	5	5	5	7	10	10	7
Japan	1	4	2	2	1	1	5	3	2	5
Korea	19	19	14	22	22	30	36	25	43	42
Thailand	4	3	1	0	0	0	1	2	1	1
East Asia, other	3	4	4	2	1	4	4	4	4	6
West Asia, total	91	93	98	105	122	150	118	144	151	140
India	34	29	29	36	35	42	44	57	56	61
Iran	37	33	40	39	55	61	42	44	43	28
Iraq	0	0	1	3	1	1	0	2	2	5
Israel	3	6	4	6	2	3	4	5	6	6
Lebanon	3	3	10	7	7	13	4	4	6	5
Saudi Arabia	0	2	0	0	1	2	0	1	2	3
Turkey	5	11	7	8	5	10	5	10	6	6
West Asia, other	9	9	7	6	16	18	19	21	30	26
Pacific/Australasia, total	1	3	6	6	3	5	5	7	6	12
Australia	1	2	3	1	0	0	2	4	1	4
Indonesia	0	0	2	3	2	3	3	2	4	7
New Zealand	0	0	1	2	0	1	0	0	0	1
Philippines	0	1	0	0	1	1	0	0	1	0
Pacific/Australasia, other	0	0	0	0	0	0	0	1	0	0
Africa, total	21	19	12	17	17	21	25	23	15	28
Egypt	6	7	2	4	4	7	4	3	3	4
Nigeria	8	5	5	7	3	5	9	6	4	2
Africa, other	7	7	5	6	10	9	12	14	8	22
Country unknown	45	59	73	70	69	22	12	14	11	6

See explanatory information, if any, and SOURCE at end of table.

Table 5. Non-U.S. citizens awarded science and engineering (S&E) doctorates, by country of citizenship, visa type, and year of doctorate: 1985-94

Country of citizenship	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
	Permanent visas, sciences									
Total foreign citizenship	616	651	734	764	759	808	896	971	1,172	2,183
North America, total	51	75	54	71	76	79	108	105	104	105
Canada	27	47	37	45	46	46	61	68	62	52
Caribbean	15	13	5	14	8	12	18	14	13	24
Central America	2	5	5	2	9	8	9	6	5	12
Mexico	7	10	7	10	13	13	20	17	24	17
South America, total	23	40	33	36	34	55	50	60	55	51
Argentina	2	6	3	8	4	9	11	13	15	12
Brazil	4	3	4	5	8	11	6	19	10	14
Chile	5	10	5	4	5	7	6	5	7	3
Colombia	4	4	5	9	5	10	10	7	4	9
South America, other	8	17	16	10	12	18	17	16	19	13
Europe, total	106	105	119	143	129	148	178	177	216	226
Belgium	2	4	2	2	3	5	7	6	6	3
England, United Kingdom	40	29	27	41	31	33	49	50	43	49
France	6	4	8	9	12	9	8	7	15	11
Germany	18	17	27	21	21	34	25	34	42	51
Europe, other	40	51	55	70	62	67	89	80	110	112
East Asia, total	135	128	145	138	159	195	241	322	442	1,423
Taiwan	70	66	74	65	75	78	72	92	82	89
China, People's Republic of	5	5	13	16	27	35	75	123	264	1,214
Hong Kong	13	8	10	10	10	7	9	18	10	13
Japan	7	7	8	8	12	22	15	15	18	25
Korea	28	27	22	27	30	40	55	57	48	57
Thailand	2	8	12	5	4	2	7	7	10	10
East Asia, other	10	7	6	7	1	11	8	10	10	15
West Asia, total	114	134	164	139	157	196	169	196	208	237
India	40	41	58	48	59	77	64	91	86	112
Iran	35	44	39	38	38	64	41	38	57	37
Iraq	3	2	7	5	1	2	3	6	2	2
Israel	7	10	16	10	18	8	14	10	16	36
Lebanon	4	5	5	3	7	5	6	2	5	7
Saudi Arabia	0	2	3	4	5	4	2	6	2	4
Turkey	7	10	5	7	6	7	6	10	12	9
West Asia, other	18	20	31	24	23	29	33	33	28	30
Pacific/Australasia, total	15	18	21	23	16	20	29	16	29	28
Australia	6	10	10	10	8	12	7	5	9	9
Indonesia	1	1	3	2	3	0	6	3	2	6
New Zealand	1	1	3	4	1	3	5	1	4	4
Philippines	7	6	4	7	4	5	11	7	13	8
Pacific/Australasia, other	0	0	1	0	0	0	0	0	1	1
Africa, total	58	44	57	64	63	71	78	72	86	95
Egypt	9	6	7	14	9	7	9	6	6	8
Nigeria	23	15	21	18	17	25	26	28	27	31
Africa, other	26	23	29	32	37	39	43	38	53	56
Country unknown	114	107	141	150	125	44	43	23	32	18

See explanatory information, if any, and SOURCE at end of table.

Table 5. Non-U.S. citizens awarded science and engineering (S&E) doctorates, by country of citizenship, visa type, and year of doctorate: 1985-94

Country of citizenship	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
	Temporary visas, S&E									
Total foreign citizenship	4,048	4,160	4,468	4,936	5,391	6,571	7,642	8,092	8,110	7,510
North America, total	248	248	256	268	315	347	399	397	386	427
Canada	125	129	141	150	165	198	222	228	214	217
Caribbean	14	15	17	13	21	20	35	28	23	33
Central America	18	18	22	28	25	42	35	44	38	55
Mexico	91	86	76	77	104	87	107	97	111	122
South America, total	230	253	267	246	256	276	325	320	331	344
Argentina	30	34	24	30	39	54	46	69	36	43
Brazil	80	92	103	89	91	87	111	112	140	141
Chile	36	33	38	40	41	43	48	42	45	38
Colombia	18	20	22	32	20	29	38	28	30	35
South America, other	66	74	80	55	65	63	82	69	80	87
Europe, total	361	419	474	520	550	622	761	740	846	873
Belgium	16	14	14	17	12	25	35	34	16	17
England, United Kingdom	60	46	65	70	60	62	80	79	107	71
France	21	28	37	42	37	50	55	67	74	80
Germany	30	40	45	56	78	85	93	85	119	134
Europe, other	234	291	313	335	363	400	498	475	530	571
East Asia, total	1,303	1,426	1,710	1,992	2,299	3,281	4,080	4,379	4,347	3,481
Taiwan	587	564	636	651	715	865	967	1,070	1,057	1,124
China, People's Republic of	131	192	275	454	584	1,096	1,693	1,883	1,875	888
Hong Kong	77	59	68	66	78	82	105	81	89	75
Japan	89	100	73	94	93	124	105	114	112	152
Korea	278	356	513	572	701	909	1,023	1,044	1,033	1,050
Thailand	92	98	82	93	72	109	85	78	66	86
East Asia, other	49	57	63	62	56	96	102	109	115	106
West Asia, total	988	981	969	989	1,029	1,308	1,383	1,551	1,542	1,699
India	384	399	416	436	442	592	644	713	790	891
Iran	161	137	103	96	105	133	144	118	103	109
Iraq	39	25	36	28	22	24	21	26	13	15
Israel	61	66	47	50	49	68	71	72	67	66
Lebanon	19	21	28	29	37	27	45	56	39	61
Saudi Arabia	58	45	47	48	55	57	65	69	42	67
Turkey	72	63	74	66	67	89	89	112	118	129
West Asia, other	194	225	218	236	252	318	304	385	370	361
Pacific/Australasia, total	132	130	110	127	147	150	182	197	192	189
Australia	32	22	29	28	33	34	26	31	37	41
Indonesia	41	40	38	38	47	50	60	73	72	70
New Zealand	18	16	10	11	26	12	18	15	20	10
Philippines	39	52	32	49	40	53	78	76	60	67
Pacific/Australasia, other	2	0	1	1	1	1	0	2	3	1
Africa, total	425	388	339	369	366	447	397	415	374	460
Egypt	92	88	89	97	96	146	99	92	79	92
Nigeria	87	61	63	62	39	53	48	34	25	27
Africa, other	246	239	187	210	231	248	250	289	270	341
Country unknown	361	315	343	425	429	140	115	93	92	37

See explanatory information, if any, and SOURCE at end of table.

Table 5. Non-U.S. citizens awarded science and engineering (S&E) doctorates, by country of citizenship, visa type, and year of doctorate: 1985-94

Country of citizenship	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
	Temporary visas, engineering									
Total foreign citizenship	1,419	1,372	1,532	1,721	1,940	2,277	2,634	2,743	2,782	2,656
North America, total	48	43	54	47	64	64	67	60	66	76
Canada	20	16	26	20	29	32	40	38	33	30
Caribbean	4	5	5	1	5	3	3	3	2	10
Central America	3	3	5	4	5	8	3	4	8	8
Mexico	21	19	18	22	25	21	21	15	23	28
South America, total	50	55	68	57	66	72	74	73	89	99
Argentina	11	10	8	6	6	10	7	10	8	6
Brazil	15	15	33	25	29	29	32	29	45	48
Chile	5	7	8	8	8	11	8	9	5	7
Colombia	4	4	7	4	3	7	10	7	7	8
South America, other	15	19	12	14	20	15	17	18	24	30
Europe, total	85	109	120	143	168	174	167	169	202	208
Belgium	8	2	6	4	5	11	8	8	5	6
England, United Kingdom	3	9	5	6	9	9	11	9	14	7
France	10	11	13	20	16	21	15	22	28	27
Germany	6	5	5	10	14	11	8	13	20	18
Europe, other	58	82	91	103	124	122	125	117	135	150
East Asia, total	546	566	688	777	883	1,138	1,464	1,538	1,511	1,313
Taiwan	299	273	321	329	360	407	509	557	518	582
China, People's Republic of	47	54	77	123	150	309	452	469	455	230
Hong Kong	24	21	13	28	33	25	23	27	22	7
Japan	24	24	13	22	18	16	24	22	21	41
Korea	114	156	224	235	286	330	399	412	441	388
Thailand	21	23	19	24	16	21	19	19	17	33
East Asia, other	17	15	21	16	20	30	38	32	37	32
West Asia, total	423	377	379	427	455	590	650	719	738	768
India	178	175	175	219	216	272	313	348	392	419
Iran	79	67	48	42	55	78	81	66	52	64
Iraq	6	4	9	5	8	13	11	12	4	4
Israel	20	20	16	19	17	19	23	21	17	11
Lebanon	8	8	17	11	18	22	34	33	21	40
Saudi Arabia	24	12	16	14	25	20	26	30	17	24
Turkey	51	38	36	34	47	49	59	71	68	58
West Asia, other	57	53	62	83	69	117	103	138	167	148
Pacific/Australasia, total	27	18	18	18	23	20	40	41	37	38
Australia	3	4	2	1	2	3	5	7	5	7
Indonesia	15	9	11	8	10	11	16	22	25	21
New Zealand	4	1	1	2	3	1	2	1	0	0
Philippines	5	4	4	7	8	5	17	11	6	9
Pacific/Australasia, other	0	0	0	0	0	0	0	0	1	1
Africa, total	116	99	95	121	123	166	130	115	107	140
Egypt	42	46	38	43	45	75	53	43	45	59
Nigeria	21	10	11	14	8	18	11	9	9	4
Africa, other	53	43	46	64	70	73	66	67	53	77
Country unknown	124	105	110	131	158	53	42	28	32	14

See explanatory information, if any, and SOURCE at end of table.

Table 5. Non-U.S. citizens awarded science and engineering (S&E) doctorates, by country of citizenship, visa type, and year of doctorate: 1985-94

Country of citizenship	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
	Temporary visas, sciences									
Total foreign citizenship	2,629	2,788	2,936	3,215	3,451	4,294	5,008	5,349	5,328	4,854
North America, total	200	205	202	221	251	283	332	337	320	351
Canada	105	113	115	130	136	166	182	190	181	187
Caribbean	10	10	12	12	16	17	32	25	21	23
Central America	15	15	17	24	20	34	32	40	30	47
Mexico	70	67	58	55	79	66	86	82	88	94
South America, total	180	198	199	189	190	204	251	247	242	245
Argentina	19	24	16	24	33	44	39	59	28	37
Brazil	65	77	70	64	62	58	79	83	95	93
Chile	31	26	30	32	33	32	40	33	40	31
Colombia	14	16	15	28	17	22	28	21	23	27
South America, other	51	55	68	41	45	48	65	51	56	57
Europe, total	276	310	354	377	382	448	594	571	644	665
Belgium	8	12	8	13	7	14	27	26	11	11
England, United Kingdom	57	37	60	64	51	53	69	70	93	64
France	11	17	24	22	21	29	40	45	46	53
Germany	24	35	40	46	64	74	85	72	99	116
Europe, other	176	209	222	232	239	278	373	358	395	421
East Asia, total	757	860	1,022	1,215	1,416	2,143	2,616	2,841	2,836	2,168
Taiwan	288	291	315	322	355	458	458	513	539	542
China, People's Republic of	84	138	198	331	434	787	1,241	1,414	1,420	658
Hong Kong	53	38	55	38	45	57	82	54	67	68
Japan	65	76	60	72	75	108	81	92	91	111
Korea	164	200	289	337	415	579	624	632	592	662
Thailand	71	75	63	69	56	88	66	59	49	53
East Asia, other	32	42	42	46	36	66	64	77	78	74
West Asia, total	565	604	590	562	574	718	733	832	804	931
India	206	224	241	217	226	320	331	365	398	472
Iran	82	70	55	54	50	55	63	52	51	45
Iraq	33	21	27	23	14	11	10	14	9	11
Israel	41	46	31	31	32	49	48	51	50	55
Lebanon	11	13	11	18	19	5	11	23	18	21
Saudi Arabia	34	33	31	34	30	37	39	39	25	43
Turkey	21	25	38	32	20	40	30	41	50	71
West Asia, other	137	172	156	153	183	201	201	247	203	213
Pacific/Australasia, total	105	112	92	109	124	130	142	156	155	151
Australia	29	18	27	27	31	31	21	24	32	34
Indonesia	26	31	27	30	37	39	44	51	47	49
New Zealand	14	15	9	9	23	11	16	14	20	10
Philippines	34	48	28	42	32	48	61	65	54	58
Pacific/Australasia, other	2	0	1	1	1	1	0	2	2	0
Africa, total	309	289	244	248	243	281	267	300	267	320
Egypt	50	42	51	54	51	71	46	49	34	33
Nigeria	66	51	52	48	31	35	37	29	16	23
Africa, other	193	196	141	146	161	175	184	222	217	264
Country unknown	237	210	233	294	271	87	73	65	60	23

SOURCE: National Science Foundation/SRS, Survey of Earned Doctorates

Table 6. Institutions conferring science and engineering (S&E) doctorates, by State, institution, and major field: 1994

[To increase readability, fields span 2 pages and institutions are repeated on facing pages]

State and institution	S&E rank	Total S&E	Engineering						Physical sciences			
			Total	Chemical	Civil	Electrical	Mechanical	Other engineering	Total	Physics & astronomy	Chemistry	Other physical sciences
Total, all institutions	-	26,211	5,826	725	684	1,675	1,015	1,727	3,975	1,692	2,254	29
Alabama, total	26	258	62	6	8	13	11	24	34	27	7	0
Alabama A&M University	152	2	0	0	0	0	0	0	2	2	0	0
Auburn University	74	107	31	4	5	7	5	10	8	5	3	0
United States Sports Academy	154	0	0	0	0	0	0	0	0	0	0	0
University of Alabama	101	56	16	2	3	2	4	5	5	2	3	0
University of Alabama Birmingham	99	58	4	0	0	0	0	4	6	5	1	0
University of Alabama Huntsville	125	29	11	0	0	4	2	5	13	13	0	0
University of South Alabama	148	6	0	0	0	0	0	0	0	0	0	0
Alaska, total	50	24	0	0	0	0	0	0	7	7	0	0
University of Alaska Fairbanks	130	24	0	0	0	0	0	0	7	7	0	0
Arizona, total	18	465	113	9	11	30	19	44	90	53	31	6
Arizona State University Main	51	156	49	3	8	8	12	18	27	12	14	1
Northern Arizona University	147	7	0	0	0	0	0	0	0	0	0	0
University of Arizona	18	302	64	6	3	22	7	26	63	41	17	5
Arkansas, total	40	79	14	3	0	4	0	7	8	1	7	0
U of Arkansas Little Rock	146	8	7	0	0	3	0	4	1	1	0	0
U of Arkansas Med Sci	143	11	0	0	0	0	0	0	0	0	0	0
U of Arkansas	97	60	7	3	0	1	0	3	7	0	7	0
California, total	1	3,584	767	61	94	275	138	199	520	246	265	9
Biola University	145	9	0	0	0	0	0	0	0	0	0	0
CA Inst Integral Studies	126	28	0	0	0	0	0	0	0	0	0	0
CA Inst Technology	54	151	53	7	2	19	11	14	61	31	26	4
CA Sch Prof Psych Fresno	101	56	0	0	0	0	0	0	0	0	0	0
CA Sch Prof Psych Los Angeles	96	61	0	0	0	0	0	0	0	0	0	0
CA Sch Prof Psych San Diego	91	68	0	0	0	0	0	0	0	0	0	0
CA Sch Prof Psych Berkeley	83	83	0	0	0	0	0	0	0	0	0	0
Claremont Graduate School	135	19	0	0	0	0	0	0	0	0	0	0
Fielding Institute	114	41	0	0	0	0	0	0	0	0	0	0
Fuller Theological Seminary CA	129	25	0	0	0	0	0	0	0	0	0	0
Golden Gate Baptist Seminary	154	0	0	0	0	0	0	0	0	0	0	0
Graduate Theological Union	153	1	0	0	0	0	0	0	0	0	0	0
Hebrew Union Col CA Branch	154	0	0	0	0	0	0	0	0	0	0	0
Loma Linda U La Sierra Campus	154	0	0	0	0	0	0	0	0	0	0	0
Loma Linda University	144	10	0	0	0	0	0	0	0	0	0	0
Naval Postgraduate School	139	15	5	0	0	1	0	4	1	1	0	0
Pacific Grad School of Psych	121	33	0	0	0	0	0	0	0	0	0	0
Pepperdine University	154	0	0	0	0	0	0	0	0	0	0	0
Rand Grad Sch of Policy Studies	151	3	0	0	0	0	0	0	0	0	0	0
Research Inst of Scripps Clinic	152	2	0	0	0	0	0	0	1	0	1	0
San Diego State University	135	19	0	0	0	0	0	0	3	0	3	0
Santa Clara University	149	5	5	0	0	4	1	0	0	0	0	0
Saybrook Institute	143	11	0	0	0	0	0	0	0	0	0	0
Stanford University	8	423	177	14	20	49	36	58	51	29	20	2
United States International U	103	54	0	0	0	0	0	0	0	0	0	0
University of the Pacific	147	7	0	0	0	0	0	0	4	0	4	0
U of California Berkeley	1	678	193	20	32	47	53	41	118	64	53	1
U of California Davis	21	283	46	4	11	8	10	13	50	21	29	0
U of California Irvine	64	133	21	1	3	10	2	5	26	7	19	0
U of California Los Angeles	12	395	86	6	16	35	12	17	56	28	28	0
U of California Riverside	77	98	0	0	0	0	0	0	26	11	15	0
U of California San Diego	30	235	43	1	3	18	3	18	39	20	17	2
U of California San Francisco	94	63	6	0	0	0	0	6	7	0	7	0
U of California Santa Barbara	45	168	46	4	0	26	7	9	27	16	11	0
U of California Santa Cruz	90	69	0	0	0	0	0	0	20	8	12	0
University of La Verne	146	8	0	0	0	0	0	0	0	0	0	0
University of San Diego	154	0	0	0	0	0	0	0	0	0	0	0
University of San Francisco	154	0	0	0	0	0	0	0	0	0	0	0
University of Southern CA	17	305	86	4	7	58	3	14	30	10	20	0
Wright Institute, All Campuses	129	25	0	0	0	0	0	0	0	0	0	0

See explanatory information, if any, and SOURCE at end of table.

Table 6. Institutions conferring science and engineering (S&E) doctorates, by State, institution, and major field: 1994

[To increase readability, fields span 2 pages and institutions are repeated on facing pages]

State and institution	Earth, atmos, ocean	Mathematics	Computer sciences	Biological & agricultural sciences			Psychology	Social sciences	Non-S&E, total	Grand total, all fields
				Total	Biological	Agricultural				
Total, all institutions	824	1,118	904	6,275	5,197	1,078	3,389	3,900	14,800	41,011
Alabama, total	3	12	7	81	58	23	37	22	215	473
Alabama A&M University	0	0	0	0	0	0	0	0	0	2
Auburn University	0	8	2	33	10	23	17	8	45	152
United States Sports Academy	0	0	0	0	0	0	0	0	1	1
University of Alabama	2	2	0	3	3	0	14	14	120	176
University of Alabama Birmingham	0	2	1	39	39	0	6	0	49	107
University of Alabama Huntsville	1	0	4	0	0	0	0	0	0	29
University of South Alabama	0	0	0	6	6	0	0	0	0	6
Alaska, total	12	0	0	3	3	0	0	2	0	24
University of Alaska Fairbanks	12	0	0	3	3	0	0	2	0	24
Arizona, total	35	16	24	94	70	24	36	57	287	752
Arizona State University Main	3	4	13	9	9	0	21	30	100	256
Northern Arizona University	0	0	0	4	4	0	0	3	47	54
University of Arizona	32	12	11	81	57	24	15	24	140	442
Arkansas, total	0	2	0	46	28	18	9	0	70	149
U of Arkansas Little Rock	0	0	0	0	0	0	0	0	0	8
U of Arkansas Med Sci	0	0	0	11	11	0	0	0	0	11
U of Arkansas	0	2	0	35	17	18	9	0	70	130
California, total	117	133	129	725	674	51	690	503	1,318	4,902
Biola University	0	0	0	0	0	0	9	0	10	19
CA Inst Integral Studies	0	0	0	0	0	0	28	0	3	31
CA Inst Technology	6	10	2	16	16	0	0	3	0	151
CA Sch Prof Psych Fresno	0	0	0	0	0	0	56	0	0	56
CA Sch Prof Psych Los Angeles	0	0	0	0	0	0	61	0	2	63
CA Sch Prof Psych San Diego	0	0	0	0	0	0	68	0	0	68
CA Sch Prof Psych Berkeley	0	0	0	0	0	0	83	0	0	83
Claremont Graduate School	0	0	2	2	2	0	5	10	53	72
Fielding Institute	0	0	1	0	0	0	39	1	11	52
Fuller Theological Seminary CA	0	0	0	0	0	0	24	1	5	30
Golden Gate Baptist Seminary	0	0	0	0	0	0	0	0	3	3
Graduate Theological Union	0	0	0	0	0	0	0	1	20	21
Hebrew Union Col CA Branch	0	0	0	0	0	0	0	0	2	2
Loma Linda U La Sierra Campus	0	0	0	0	0	0	0	0	4	4
Loma Linda University	0	0	0	10	10	0	0	0	7	17
Naval Postgraduate School	4	2	3	0	0	0	0	0	0	15
Pacific Grad School of Psych	0	0	0	0	0	0	33	0	0	33
Pepperdine University	0	0	0	0	0	0	0	0	17	17
Rand Grad Sch of Policy Studies	0	0	0	0	0	0	0	3	0	3
Research Inst of Scripps Clinic	0	0	0	1	1	0	0	0	0	2
San Diego State University	0	0	0	8	8	0	8	0	6	25
Santa Clara University	0	0	0	0	0	0	0	0	0	5
Saybrook Institute	0	0	0	0	0	0	9	2	0	11
Stanford University	19	10	20	69	67	2	19	58	128	551
United States International U	0	0	0	0	0	0	54	0	29	83
University of the Pacific	0	0	0	3	3	0	0	0	15	22
U of California Berkeley	13	41	24	132	112	20	27	130	213	891
U of California Davis	9	8	5	136	113	23	5	24	38	321
U of California Irvine	0	3	8	41	41	0	10	24	39	172
U of California Los Angeles	23	20	15	83	83	0	35	77	224	619
U of California Riverside	0	5	0	43	37	6	12	12	37	135
U of California San Diego	17	14	18	62	62	0	13	29	35	270
U of California San Francisco	0	0	0	38	38	0	4	8	22	85
U of California Santa Barbara	9	11	7	24	24	0	21	23	54	222
U of California Santa Cruz	9	6	4	17	17	0	8	5	20	89
University of La Verne	0	0	0	0	0	0	0	8	48	56
University of San Diego	0	0	0	0	0	0	0	0	13	13
University of San Francisco	0	0	0	0	0	0	0	0	61	61
University of Southern CA	8	3	20	40	40	0	34	84	199	504
Wright Institute, All Campuses	0	0	0	0	0	0	25	0	0	25

See explanatory information, if any, and SOURCE at end of table.

Table 6. Institutions conferring science and engineering (S&E) doctorates, by State, institution, and major field: 1994

[To increase readability, fields span 2 pages and institutions are repeated on facing pages]

State and institution	S&E rank	Total S&E	Engineering						Physical sciences			
			Total	Chemical	Civil	Electrical	Mechanical	Other engineering	Total	Physics & astronomy	Chemistry	Other physical sciences
Colorado, total	16	511	128	9	42	31	7	39	88	41	47	0
Colorado School of Mines	107	50	17	3	0	0	0	14	5	4	1	0
Colorado State University	52	153	44	4	23	8	2	7	18	3	15	0
University of Colorado Boulder	22	272	67	2	19	23	5	18	64	34	30	0
University of Denver	130	24	0	0	0	0	0	0	1	0	1	0
University of Northern Colorado	142	12	0	0	0	0	0	0	0	0	0	0
Connecticut, total	22	413	51	14	2	15	15	5	75	31	44	0
University of Connecticut	40	176	35	13	2	8	7	5	24	7	17	0
University of Hartford	154	0	0	0	0	0	0	0	0	0	0	0
University of New Haven	154	0	0	0	0	0	0	0	0	0	0	0
Wesleyan University	139	15	0	0	0	0	0	0	9	2	7	0
Yale University	32	222	16	1	0	7	8	0	42	22	20	0
Delaware, total	38	98	33	16	4	5	8	0	10	4	6	0
University of Delaware	77	98	33	16	4	5	8	0	10	4	6	0
District of Columbia, total	25	295	35	0	4	15	3	13	26	6	20	0
American University	112	44	0	0	0	0	0	0	6	3	3	0
Catholic University of America	118	37	6	0	3	2	1	0	4	1	3	0
Gallaudet University	154	0	0	0	0	0	0	0	0	0	0	0
George Washington University	75	105	23	0	1	10	1	11	6	0	6	0
Georgetown University	95	62	0	0	0	0	0	0	4	0	4	0
Howard University	109	47	6	0	0	3	1	2	6	2	4	0
Florida, total	10	683	140	7	21	43	17	52	85	30	54	1
Barry University	154	0	0	0	0	0	0	0	0	0	0	0
Florida Atlantic University	129	25	16	0	0	11	1	4	2	2	0	0
Florida Institute of Technology	143	11	7	0	0	3	2	2	0	0	0	0
Florida International University	146	8	0	0	0	0	0	0	0	0	0	0
Florida State University	73	109	3	0	0	0	2	1	18	10	7	1
Nova Southeastern University	114	41	0	0	0	0	0	0	0	0	0	0
University of Central Florida	139	15	8	0	2	4	1	1	1	1	0	0
University of Florida	15	333	83	6	15	20	6	36	52	16	36	0
University of Miami	88	72	11	0	4	1	5	1	6	1	5	0
University of South Florida	90	69	12	1	0	4	0	7	6	0	6	0
Georgia, total	19	456	136	9	12	45	25	45	49	12	37	0
Clark Atlanta University	133	21	0	0	0	0	0	0	2	0	2	0
Emory University	108	48	0	0	0	0	0	0	9	0	9	0
Georgia Inst of Tech	39	190	135	8	12	45	25	45	16	7	9	0
Georgia State University	117	38	0	0	0	0	0	0	5	3	2	0
Inst of Paper Science & Tech	150	4	1	1	0	0	0	0	0	0	0	0
Medical College of Georgia	151	3	0	0	0	0	0	0	0	0	0	0
University of Georgia	53	152	0	0	0	0	0	0	17	2	15	0
Hawaii, total	37	126	4	0	0	1	1	2	11	7	4	0
University of Hawaii at Manoa	65	126	4	0	0	1	1	2	11	7	4	0
Idaho, total	42	63	14	6	1	3	1	3	8	2	6	0
Idaho State University	142	12	0	0	0	0	0	0	0	0	0	0
University of Idaho	106	51	14	6	1	3	1	3	8	2	6	0
Illinois, total	5	1,357	306	26	44	99	64	73	206	95	111	0
De Paul University	146	8	0	0	0	0	0	0	0	0	0	0
Finch U Hlth Sci/Chgo Med Sch	126	28	0	0	0	0	0	0	0	0	0	0
Illinois Institute Technology	97	60	15	3	2	4	1	5	6	5	1	0
Illinois State University	145	9	0	0	0	0	0	0	0	0	0	0
Loyola University of Chicago	110	46	0	0	0	0	0	0	6	0	6	0
Lutheran Sch Theology at Chicago	154	0	0	0	0	0	0	0	0	0	0	0
Northern Illinois University	123	31	0	0	0	0	0	0	2	0	2	0
Northwestern Univ	31	224	86	11	12	21	16	26	30	11	19	0
Roosevelt University	154	0	0	0	0	0	0	0	0	0	0	0
Rush University	143	11	0	0	0	0	0	0	1	1	0	0
Southern Illinois U Edwardsville	154	0	0	0	0	0	0	0	0	0	0	0
Southern Illinois U Carbondale	92	66	2	0	1	1	0	0	6	2	4	0
University of Chicago	29	238	0	0	0	0	0	0	47	25	22	0
U of Illinois Chicago	43	170	50	3	6	9	23	9	35	8	27	0
U of Illinois Urbana-Champaign	5	466	153	9	23	64	24	33	73	43	30	0

See explanatory information, if any, and SOURCE at end of table.

Table 6. Institutions conferring science and engineering (S&E) doctorates, by State, institution, and major field: 1994

[To increase readability, fields span 2 pages and institutions are repeated on facing pages]

State and institution	Earth, atmos, ocean	Mathematics	Computer sciences	Biological & agricultural sciences			Psychology	Social sciences	Non-S&E, total	Grand total, all fields
				Total	Biological	Agricultural				
Colorado, total	40	34	20	79	63	16	47	75	196	707
Colorado School of Mines	17	6	0	0	0	0	0	5	0	50
Colorado State University	7	8	4	40	24	16	18	14	22	175
University of Colorado Boulder	16	12	16	39	39	0	19	39	82	354
University of Denver	0	0	0	0	0	0	8	15	38	62
University of Northern Colorado	0	8	0	0	0	0	2	2	54	66
Connecticut, total	3	14	14	108	104	4	52	96	208	621
University of Connecticut	1	5	7	44	43	1	28	32	70	246
University of Hartford	0	0	0	0	0	0	0	0	1	1
University of New Haven	0	0	0	0	0	0	0	0	4	4
Wesleyan University	0	2	0	4	4	0	0	0	6	21
Yale University	2	7	7	60	57	3	24	64	127	349
Delaware, total	8	3	6	12	11	1	13	13	23	121
University of Delaware	8	3	6	12	11	1	13	13	23	121
District of Columbia, total	1	7	8	57	57	0	62	99	165	460
American University	0	2	0	0	0	0	15	21	15	59
Catholic University of America	0	1	0	6	6	0	14	6	64	101
Gallaudet University	0	0	0	0	0	0	0	0	6	6
George Washington University	1	1	8	26	26	0	15	25	44	149
Georgetown University	0	0	0	19	19	0	1	38	13	75
Howard University	0	3	0	6	6	0	17	9	23	70
Florida, total	27	27	34	145	108	37	120	105	817	1,500
Barry University	0	0	0	0	0	0	0	0	5	5
Florida Atlantic University	0	1	0	1	1	0	1	4	9	34
Florida Institute of Technology	2	1	0	1	1	0	0	0	3	14
Florida International University	0	0	0	2	2	0	2	4	24	32
Florida State University	7	11	3	17	17	0	23	27	174	283
Nova Southeastern University	0	0	17	0	0	0	18	6	374	415
University of Central Florida	0	0	1	0	0	0	5	0	30	45
University of Florida	3	9	7	92	56	36	37	50	103	436
University of Miami	7	3	1	16	15	1	22	6	43	115
University of South Florida	8	2	5	16	16	0	12	8	52	121
Georgia, total	5	15	9	105	77	28	75	62	315	771
Clark Atlanta University	0	0	0	2	2	0	8	9	20	41
Emory University	0	3	0	12	12	0	13	11	46	94
Georgia Inst of Tech	5	8	9	11	11	0	6	0	12	202
Georgia State University	0	1	0	2	2	0	21	9	77	115
Inst of Paper Science & Tech	0	0	0	3	0	3	0	0	0	4
Medical College of Georgia	0	0	0	3	3	0	0	0	3	6
University of Georgia	0	3	0	72	47	25	27	33	157	309
Hawaii, total	14	1	2	29	22	7	12	53	40	166
University of Hawaii at Manoa	14	1	2	29	22	7	12	53	40	166
Idaho, total	3	4	0	29	15	14	0	5	25	88
Idaho State University	0	3	0	6	6	0	0	3	8	20
University of Idaho	3	1	0	23	9	14	0	2	17	68
Illinois, total	21	63	70	293	255	38	155	243	811	2,168
De Paul University	0	0	0	0	0	0	8	0	4	12
Finch U Hlth Sci/Chgo Med Sch	0	0	0	18	18	0	10	0	0	28
Illinois Institute Technology	0	0	23	1	1	0	15	0	0	60
Illinois State University	0	0	0	6	6	0	0	3	34	43
Loyola University of Chicago	0	1	0	13	13	0	21	5	59	105
Lutheran Sch Theology at Chicago	0	0	0	0	0	0	0	0	4	4
Northern Illinois University	2	1	0	7	7	0	7	12	76	107
Northwestern Univ	3	14	11	31	31	0	17	32	95	319
Roosevelt University	0	0	0	0	0	0	0	0	2	2
Rush University	0	0	0	10	10	0	0	0	8	19
Southern Illinois U Edwardsville	0	0	0	0	0	0	0	0	9	9
Southern Illinois U Carbondale	2	2	0	18	17	1	18	18	106	172
University of Chicago	6	14	3	48	48	0	23	97	155	393
U of Illinois Chicago	4	12	6	33	33	0	8	22	62	232
U of Illinois Urbana-Champaign	4	19	27	108	71	37	28	54	197	663

See explanatory information, if any, and SOURCE at end of table.

Table 6. Institutions conferring science and engineering (S&E) doctorates, by State, institution, and major field: 1994

[To increase readability, fields span 2 pages and institutions are repeated on facing pages]

State and institution	S&E rank	Total S&E	Engineering						Physical sciences			
			Total	Chemical	Civil	Electrical	Mechanical	Other engineering	Total	Physics & astronomy	Chemistry	Other physical sciences
Indiana, total	9	686	156	23	24	49	22	38	126	37	89	0
Ball State University	134	20	0	0	0	0	0	0	0	0	0	0
Indiana State University	137	17	0	0	0	0	0	0	0	0	0	0
Indiana U at Bloomington	44	169	0	0	0	0	0	0	36	12	24	0
Indiana U Purdue U Indianapolis	154	0	0	0	0	0	0	0	0	0	0	0
Purdue University	11	404	140	20	21	45	20	34	74	16	58	0
University of Notre Dame	86	76	16	3	3	4	2	4	16	9	7	0
Iowa, total	21	422	103	9	17	18	28	31	74	22	52	0
Drake University	154	0	0	0	0	0	0	0	0	0	0	0
Iowa State University	26	259	65	6	9	10	20	20	45	11	34	0
Maharishi International U	150	4	0	0	0	0	0	0	2	2	0	0
University of Iowa	50	157	36	3	8	8	8	9	27	9	18	0
University of Northern Iowa	152	2	2	0	0	0	0	2	0	0	0	0
Kansas, total	28	250	47	7	6	11	8	15	30	6	24	0
Kansas State University	75	105	14	1	3	4	1	5	8	3	5	0
University of Kansas	66	125	20	6	3	2	4	5	19	3	16	0
Wichita State University	134	20	13	0	0	5	3	5	3	0	3	0
Kentucky, total	33	185	29	5	2	4	10	8	32	8	24	0
Southern Baptist Theological Sem	150	4	0	0	0	0	0	0	0	0	0	0
University of Kentucky	60	142	21	2	2	2	10	5	26	8	18	0
University of Louisville	116	39	8	3	0	2	0	3	6	0	6	0
Louisiana, total	27	254	42	9	10	4	8	11	21	8	13	0
Grambling State University	154	0	0	0	0	0	0	0	0	0	0	0
LA St U & A&M Col	63	135	28	7	8	2	4	7	15	7	8	0
LA St U Med Ctr Shreveport	148	6	0	0	0	0	0	0	0	0	0	0
LA St U Medical Center	143	11	0	0	0	0	0	0	0	0	0	0
Louisiana Tech University	152	2	2	0	1	0	1	0	0	0	0	0
New Orleans Baptist Theol Sem	153	1	0	0	0	0	0	0	0	0	0	0
Northeast Louisiana University	151	3	0	0	0	0	0	0	0	0	0	0
Southern U A&M Col Baton Rouge	154	0	0	0	0	0	0	0	0	0	0	0
Tulane University	98	59	10	2	1	0	3	4	5	1	4	0
University of New Orleans	140	14	0	0	0	0	0	0	1	0	1	0
U of Southwestern Louisiana	131	23	2	0	0	2	0	0	0	0	0	0
Maine, total	47	39	10	3	3	1	0	3	5	3	2	0
University of Maine	116	39	10	3	3	1	0	3	5	3	2	0
Maryland, total	13	621	136	11	21	49	19	36	75	47	26	2
Johns Hopkins University	40	176	32	6	4	1	5	16	19	12	5	2
Loyola College	145	9	0	0	0	0	0	0	0	0	0	0
Morgan State University	154	0	0	0	0	0	0	0	0	0	0	0
Peabody Inst of Johns Hopkins U	154	0	0	0	0	0	0	0	0	0	0	0
Uniformed Services U of Hlth Sci	143	11	0	0	0	0	0	0	0	0	0	0
U of Maryland Baltimore	116	39	0	0	0	0	0	0	1	0	1	0
U of Maryland College Park	14	353	98	3	17	45	14	19	51	34	17	0
U of Maryland Baltimore County	123	31	6	2	0	3	0	1	4	1	3	0
U of Maryland Eastern Shore	152	2	0	0	0	0	0	0	0	0	0	0
Massachusetts, total	4	1,526	311	40	17	110	44	100	316	174	141	1
American International College	154	0	0	0	0	0	0	0	0	0	0	0
Boston College	106	51	0	0	0	0	0	0	7	3	4	0
Boston University	54	151	11	0	0	7	1	3	28	25	3	0
Brandeis University	93	64	1	0	0	1	0	0	10	3	7	0
Clark University	133	21	0	0	0	0	0	0	4	2	2	0
Harvard University	16	328	9	0	0	2	0	7	63	31	32	0
MA Col Phar Allied Hlth	147	7	0	0	0	0	0	0	4	0	4	0
Massachusetts Institute of Tech	3	490	193	22	11	49	34	77	113	73	39	1
Northeastern University	90	69	19	0	1	14	1	3	11	4	7	0
Simmons College	154	0	0	0	0	0	0	0	0	0	0	0
Smith College	154	0	0	0	0	0	0	0	0	0	0	0
Springfield College	154	0	0	0	0	0	0	0	0	0	0	0
Tufts University	87	73	9	1	0	5	1	2	9	6	3	0
U of Massachusetts Amherst	37	199	46	10	5	23	5	3	42	11	31	0
U of Massachusetts Boston	150	4	0	0	0	0	0	0	0	0	0	0

See explanatory information, if any, and SOURCE at end of table.

Table 6. Institutions conferring science and engineering (S&E) doctorates, by State, institution, and major field: 1994

[To increase readability, fields span 2 pages and institutions are repeated on facing pages]

State and institution	Earth, atmos, ocean	Mathematics	Computer sciences	Biological & agricultural sciences			Psychology	Social sciences	Non-S&E, total	Grand total, all fields
				Total	Biological	Agricultural				
Indiana, total	16	45	19	130	109	21	82	112	379	1,065
Ball State University	0	0	0	0	0	0	18	2	35	55
Indiana State University	0	0	0	3	3	0	12	2	17	34
Indiana U at Bloomington	7	11	3	44	44	0	16	52	192	361
Indiana U Purdue U Indianapolis	0	0	0	0	0	0	0	0	11	11
Purdue University	9	27	16	73	52	21	26	39	91	495
University of Notre Dame	0	7	0	10	10	0	10	17	33	109
Iowa, total	5	24	5	132	96	36	27	52	260	682
Drake University	0	0	0	0	0	0	0	0	12	12
Iowa State University	1	13	3	92	56	36	13	27	47	306
Maharishi International U	0	0	0	2	2	0	0	0	1	5
University of Iowa	4	11	2	38	38	0	14	25	184	341
University of Northern Iowa	0	0	0	0	0	0	0	0	16	18
Kansas, total	3	17	4	83	47	36	38	28	165	415
Kansas State University	0	9	4	54	18	36	5	11	49	154
University of Kansas	3	6	0	27	27	0	33	17	112	237
Wichita State University	0	2	0	2	2	0	0	0	4	24
Kentucky, total	2	8	4	53	44	9	28	29	144	329
Southern Baptist Theological Sem	0	0	0	0	0	0	3	1	39	43
University of Kentucky	2	8	3	41	32	9	16	25	86	228
University of Louisville	0	0	1	12	12	0	9	3	19	58
Louisiana, total	8	9	23	82	68	14	27	42	192	446
Grambling State University	0	0	0	0	0	0	0	0	8	8
LA St U & A&M Col	8	4	8	40	26	14	15	17	82	217
LA St U Med Ctr Shreveport	0	0	0	6	6	0	0	0	0	6
LA St U Medical Center	0	0	0	11	11	0	0	0	6	17
Louisiana Tech University	0	0	0	0	0	0	0	0	17	19
New Orleans Baptist Theol Sem	0	0	0	0	0	0	1	0	26	27
Northeast Louisiana University	0	0	0	3	3	0	0	0	2	5
Southern U A&M Col Baton Rouge	0	0	0	0	0	0	0	0	1	1
Tulane University	0	1	1	19	19	0	6	17	23	82
University of New Orleans	0	0	0	0	0	0	5	8	19	33
U of Southwestern Louisiana	0	4	14	3	3	0	0	0	8	31
Maine, total	3	1	0	14	8	6	6	0	6	45
University of Maine	3	1	0	14	8	6	6	0	6	45
Maryland, total	15	28	30	177	163	14	58	102	319	940
Johns Hopkins University	6	4	0	68	68	0	6	41	86	262
Loyola College	0	0	0	0	0	0	9	0	0	9
Morgan State University	0	0	0	0	0	0	0	0	9	9
Peabody Inst of Johns Hopkins U	0	0	0	0	0	0	0	0	23	23
Uniformed Services U of Hlth Sci	0	0	0	7	7	0	4	0	0	11
U of Maryland Baltimore	0	0	0	38	38	0	0	0	26	65
U of Maryland College Park	7	21	24	59	45	14	36	57	173	526
U of Maryland Baltimore County	0	3	6	5	5	0	3	4	2	33
U of Maryland Eastern Shore	2	0	0	0	0	0	0	0	0	2
Massachusetts, total	42	68	55	331	319	12	99	304	669	2,195
American International College	0	0	0	0	0	0	0	0	4	4
Boston College	1	0	0	6	6	0	21	16	64	115
Boston University	0	8	4	50	50	0	15	35	130	281
Brandeis University	0	9	1	13	13	0	4	26	34	98
Clark University	0	0	0	3	3	0	5	9	4	25
Harvard University	8	14	4	110	110	0	11	109	223	551
MA Col Phar Allied Hlth	0	0	0	3	3	0	0	0	2	9
Massachusetts Institute of Tech	30	29	24	46	46	0	7	48	26	516
Northeastern University	0	4	7	6	6	0	10	12	5	74
Simmons College	0	0	0	0	0	0	0	0	3	3
Smith College	0	0	0	0	0	0	0	0	5	5
Springfield College	0	0	0	0	0	0	0	0	2	2
Tufts University	0	0	0	30	30	0	5	20	6	79
U of Massachusetts Amherst	1	4	10	47	35	12	20	29	139	338
U of Massachusetts Boston	2	0	0	1	1	0	1	0	0	4

See explanatory information, if any, and SOURCE at end of table.

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Table 6. Institutions conferring science and engineering (S&E) doctorates, by State, institution, and major field: 1994

[To increase readability, fields span 2 pages and institutions are repeated on facing pages]

State and institution	S&E rank	Total S&E	Engineering						Physical sciences			
			Total	Chemical	Civil	Electrical	Mechanical	Other engineering	Total	Physics & astronomy	Chemistry	Other physical sciences
Massachusetts, continued												
U of Massachusetts Worcester	143	11	0	0	0	0	0	0	0	0	0	0
U of Massachusetts Lowell	114	41	13	4	0	7	0	2	25	16	9	0
Worcester Polytechnic Institute	137	17	10	3	0	2	2	3	0	0	0	0
Michigan, total	8	964	245	16	23	66	64	76	148	49	99	0
Andrews University	151	3	0	0	0	0	0	0	0	0	0	0
Eastern Michigan University	154	0	0	0	0	0	0	0	0	0	0	0
Michigan State University	23	271	30	2	9	8	6	5	44	17	27	0
Michigan Technological U	134	20	11	2	2	0	4	3	1	1	0	0
Oakland University	144	10	6	0	0	1	0	5	2	1	1	0
University of Detroit Mercy	142	12	1	0	0	0	1	0	0	0	0	0
University of Michigan Ann Arbor	4	469	161	9	7	46	42	57	69	26	43	0
Wayne State University	48	162	36	3	5	11	11	6	32	4	28	0
Western Michigan University	137	17	0	0	0	0	0	0	0	0	0	0
Minnesota, total	17	484	109	32	12	20	22	23	59	25	34	0
Luther Seminary	154	0	0	0	0	0	0	0	0	0	0	0
Mayo Graduate School	140	14	0	0	0	0	0	0	0	0	0	0
U of Minnesota Twin Cities	6	438	108	32	11	20	22	23	59	25	34	0
University of St Thomas	154	0	0	0	0	0	0	0	0	0	0	0
Walden University	122	32	1	0	1	0	0	0	0	0	0	0
Mississippi, total	36	135	16	3	1	2	1	9	18	4	14	0
Delta State University	154	0	0	0	0	0	0	0	0	0	0	0
Jackson State University	154	0	0	0	0	0	0	0	0	0	0	0
Mississippi State University	89	70	9	2	0	1	1	5	4	0	4	0
U of Mississippi Med Ctr	151	3	0	0	0	0	0	0	0	0	0	0
U of Mississippi	127	27	6	0	1	1	0	4	5	4	1	0
U of Southern Mississippi	120	35	1	1	0	0	0	0	9	0	9	0
Missouri, total	20	443	97	16	13	23	9	36	64	26	38	0
Concordia Seminary	154	0	0	0	0	0	0	0	0	0	0	0
Midwestern Baptist Theol Sem	153	1	0	0	0	0	0	0	0	0	0	0
St Louis University	113	42	0	0	0	0	0	0	0	0	0	0
University Missouri Columbia	50	157	30	7	3	11	3	6	17	5	12	0
University Missouri Kansas City	131	23	0	0	0	0	0	0	3	0	3	0
University Missouri Rolla	92	66	42	5	4	5	5	23	17	7	10	0
University Missouri St Louis	146	8	0	0	0	0	0	0	3	0	3	0
Washington University	57	146	25	4	6	7	1	7	24	14	10	0
Montana, total	46	40	1	0	0	1	0	0	8	2	6	0
Montana State University	133	21	1	0	0	1	0	0	6	2	4	0
University of Montana	135	19	0	0	0	0	0	0	2	0	2	0
Nebraska, total	35	145	18	1	1	4	6	6	16	5	11	0
Creighton University	149	5	0	0	0	0	0	0	0	0	0	0
U of Nebraska at Lincoln	61	140	18	1	1	4	6	6	16	5	11	0
Nevada, total	48	34	6	0	2	2	1	1	6	1	5	0
University of Nevada-Las Vegas	151	3	0	0	0	0	0	0	0	0	0	0
University of Nevada-Reno	123	31	6	0	2	2	1	1	6	1	5	0
New Hampshire, total	39	97	17	2	4	2	1	8	16	8	8	0
Dartmouth College	105	52	10	0	0	2	1	7	10	6	4	0
University of New Hampshire	111	45	7	2	4	0	0	1	6	2	4	0
New Jersey, total	15	586	145	22	17	46	25	35	107	49	58	0
Drew University	152	2	0	0	0	0	0	0	0	0	0	0
Fairleigh Dickinson U Rutherford	143	11	0	0	0	0	0	0	0	0	0	0
New Jersey Institute Technology	126	28	23	7	3	7	6	0	1	1	0	0
Princeton Theological Seminary	154	0	0	0	0	0	0	0	0	0	0	0
Princeton University	36	202	41	9	5	18	7	2	54	30	24	0
Rutgers St U NJ New Brunswick	25	264	70	6	6	17	10	31	33	12	21	0
Rutgers St U NJ Newark Campus	126	28	0	0	0	0	0	0	8	0	8	0
Seton Hall University	149	5	0	0	0	0	0	0	4	0	4	0
Stevens Institute of Technology	133	21	11	0	3	4	2	2	7	6	1	0
U of Medicine & Dentistry of NJ	129	25	0	0	0	0	0	0	0	0	0	0

See explanatory information, if any, and SOURCE at end of table.

Table 6. Institutions conferring science and engineering (S&E) doctorates, by State, institution, and major field: 1994

[To increase readability, fields span 2 pages and institutions are repeated on facing pages]

State and institution	Earth, atmos, ocean	Mathematics	Computer sciences	Biological & agricultural sciences			Psychology	Social sciences	Non-S&E, total	Grand total, all fields
				Total	Biological	Agricultural				
Massachusetts, continued										
U of Massachusetts Worcester	0	0	0	11	11	0	0	0	0	11
U of Massachusetts Lowell	0	0	3	0	0	0	0	0	22	63
Worcester Polytechnic Institute	0	0	2	5	5	0	0	0	0	17
Michigan, total	24	37	30	233	184	49	113	134	546	1,510
Andrews University	0	0	0	0	0	0	3	0	16	19
Eastern Michigan University	0	0	0	0	0	0	0	0	1	1
Michigan State University	2	13	8	100	54	46	24	50	147	418
Michigan Technological U	3	0	0	5	4	1	0	0	2	22
Oakland University	0	0	0	2	2	0	0	0	5	15
University of Detroit Mercy	0	0	0	0	0	0	11	0	0	12
University of Michigan Ann Arbor	19	21	11	79	77	2	42	67	235	704
Wayne State University	0	3	11	47	47	0	23	10	101	263
Western Michigan University	0	0	0	0	0	0	10	7	39	56
Minnesota, total	5	23	19	135	104	31	77	57	395	879
Luther Seminary	0	0	0	0	0	0	0	0	7	7
Mayo Graduate School	0	0	0	14	14	0	0	0	1	15
U of Minnesota Twin Cities	5	23	19	121	90	31	50	53	268	706
University of St Thomas	0	0	0	0	0	0	0	0	12	12
Walden University	0	0	0	0	0	0	27	4	107	139
Mississippi, total	0	4	1	42	21	21	36	18	184	319
Delta State University	0	0	0	0	0	0	0	0	9	9
Jackson State University	0	0	0	0	0	0	0	0	10	10
Mississippi State University	0	4	1	33	12	21	5	14	54	124
U of Mississippi Med Ctr	0	0	0	3	3	0	0	0	0	3
U of Mississippi	0	0	0	2	2	0	10	4	51	78
U of Southern Mississippi	0	0	0	4	4	0	21	0	60	95
Missouri, total	7	9	9	139	111	28	63	55	257	700
Concordia Seminary	0	0	0	0	0	0	0	0	2	2
Midwestern Baptist Theol Sem	0	0	0	0	0	0	1	0	24	25
St Louis University	1	0	0	22	22	0	11	8	71	113
University Missouri Columbia	3	3	1	57	29	28	22	24	95	252
University Missouri Kansas City	0	0	2	4	4	0	14	0	20	43
University Missouri Rolla	1	1	5	0	0	0	0	0	0	66
University Missouri St Louis	0	0	0	1	1	0	4	0	8	16
Washington University	2	5	1	55	55	0	11	23	37	183
Montana, total	0	3	0	22	10	12	5	1	18	58
Montana State University	0	2	0	12	7	5	0	0	13	34
University of Montana	0	1	0	10	3	7	5	1	5	24
Nebraska, total	1	3	5	68	29	39	16	18	99	244
Creighton University	0	0	0	5	5	0	0	0	0	5
U of Nebraska at Lincoln	1	3	5	63	24	39	16	18	99	239
Nevada, total	8	0	0	6	6	0	5	3	21	55
University of Nevada Las Vegas	0	0	0	1	1	0	0	2	8	11
University of Nevada Reno	8	0	0	5	5	0	5	1	13	44
New Hampshire, total	4	7	5	29	29	0	11	8	13	110
Dartmouth College	2	4	5	17	17	0	4	0	0	52
University of New Hampshire	2	3	0	12	12	0	7	8	13	58
New Jersey, total	12	35	23	143	120	23	40	81	269	855
Drew University	0	0	0	0	0	0	0	2	26	28
Fairleigh Dickinson U Rutherford	0	0	0	0	0	0	11	0	0	11
New Jersey Institute Technology	0	0	4	0	0	0	0	0	0	28
Princeton Theological Seminary	0	0	0	0	0	0	0	0	13	13
Princeton University	4	19	8	19	19	0	10	47	66	268
Rutgers St U NJ New Brunswick	8	16	10	88	65	23	15	24	111	375
Rutgers St U NJ Newark Campus	0	0	0	10	10	0	2	8	15	43
Seton Hall University	0	0	0	1	1	0	0	0	37	42
Stevens Institute of Technology	0	0	1	0	0	0	2	0	1	22
U of Medicine & Dentistry of NJ	0	0	0	25	25	0	0	0	0	25

See explanatory information, if any, and SOURCE at end of table.

Table 6. Institutions conferring science and engineering (S&E) doctorates, by State, institution, and major field: 1994

[To increase readability, fields span 2 pages and institutions are repeated on facing pages]

State and institution	S&E rank	Total S&E	Engineering						Physical sciences			
			Total	Chemical	Civil	Electrical	Mechanical	Other engineering	Total	Physics & astronomy	Chemistry	Other physical sciences
New Mexico, total	34	165	32	3	3	17	3	6	29	16	13	0
New Mexico Inst Mining & Tech	142	12	1	1	0	0	0	0	1	1	0	0
New Mexico State University	104	53	14	0	1	7	3	3	7	2	5	0
University of New Mexico	76	100	17	2	2	10	0	3	21	13	8	0
New York, total	2	2,549	486	65	35	164	97	125	404	209	193	2
Adelphi University	130	24	0	0	0	0	0	0	0	0	0	0
Albany Medical College	146	8	0	0	0	0	0	0	0	0	0	0
Alfred University	149	5	5	0	0	0	0	5	0	0	0	0
Clarkson University	109	47	29	14	4	5	1	5	14	3	11	0
Columbia U in City of New York	24	268	63	11	4	18	21	9	46	26	20	0
Cornell U Medical Campus	130	24	0	0	0	0	0	0	0	0	0	0
Cornell U Endowed Colleges	5	466	112	15	11	22	24	40	74	40	34	0
CUNY Grad School & U Center	34	207	15	1	0	5	4	5	39	19	19	1
Fordham University	109	47	0	0	0	0	0	0	0	0	0	0
Hofstra University	112	44	0	0	0	0	0	0	0	0	0	0
Jewish Theological Sem America	154	0	0	0	0	0	0	0	0	0	0	0
Juilliard School	154	0	0	0	0	0	0	0	0	0	0	0
Long Island University Brooklyn	144	10	0	0	0	0	0	0	0	0	0	0
Manhattan School of Music	154	0	0	0	0	0	0	0	0	0	0	0
New School For Social Research	116	39	0	0	0	0	0	0	0	0	0	0
New York Medical College	144	10	0	0	0	0	0	0	0	0	0	0
New York University	52	153	1	0	0	0	0	1	19	10	9	0
Pace University New York Campus	154	0	0	0	0	0	0	0	0	0	0	0
Polytechnic University	106	51	31	1	3	17	3	7	11	4	7	0
Rensselaer Polytechnic Institute	47	164	105	15	2	36	23	29	29	18	11	0
Rockefeller University	129	25	0	0	0	0	0	0	1	1	0	0
St John's U (Jamaica, NY)	138	16	0	0	0	0	0	0	1	0	1	0
Syracuse University	68	117	30	1	1	27	1	0	14	8	6	0
SUNY at Albany	81	89	0	0	0	0	0	0	18	12	6	0
SUNY at Binghamton	87	73	10	0	0	6	1	3	5	1	4	0
SUNY at Buffalo	38	196	41	1	10	9	12	9	26	10	16	0
SUNY at Stony Brook	35	204	15	0	0	7	3	5	55	26	28	1
SUNY Col Environ Sci & Forestry	135	19	0	0	0	0	0	0	3	0	3	0
SUNY Health Sci Ctr Brooklyn	136	18	0	0	0	0	0	0	0	0	0	0
SUNY Health Sci Ctr Syracuse	140	14	0	0	0	0	0	0	0	0	0	0
Teachers College Columbia U	154	0	0	0	0	0	0	0	0	0	0	0
Union Theological Seminary	154	0	0	0	0	0	0	0	0	0	0	0
University of Rochester	46	167	29	6	0	12	4	7	48	31	17	0
Yeshiva University	112	44	0	0	0	0	0	0	1	0	1	0
North Carolina, total	12	647	135	6	13	44	23	49	95	24	71	0
Campbell University	154	0	0	0	0	0	0	0	0	0	0	0
Duke University	56	149	34	0	2	7	12	13	25	8	17	0
East Carolina University	146	8	0	0	0	0	0	0	0	0	0	0
North Carolina State U Raleigh	27	250	94	6	11	37	11	29	21	10	11	0
U of North Carolina Chapel Hill	33	208	7	0	0	0	0	7	42	4	38	0
U of North Carolina Greensboro	138	16	0	0	0	0	0	0	0	0	0	0
Wake Forest University	138	16	0	0	0	0	0	0	7	2	5	0
North Dakota, total	43	52	1	0	0	1	0	0	5	0	5	0
North Dakota State University	124	30	1	0	0	1	0	0	3	0	3	0
University of North Dakota	132	22	0	0	0	0	0	0	2	0	2	0

See explanatory information, if any, and SOURCE at end of table.

Table 6. Institutions conferring science and engineering (S&E) doctorates, by State, institution, and major field: 1994

[To increase readability, fields span 2 pages and institutions are repeated on facing pages]

State and institution	Earth, atmos, ocean	Mathematics	Computer sciences	Biological & agricultural sciences			Psychology	Social sciences	Non-S&E, total	Grand total, all fields
				Total	Biological	Agricultural				
New Mexico, total	16	10	4	29	19	10	21	24	76	241
New Mexico Inst Mining & Tech	8	0	2	0	0	0	0	0	0	12
New Mexico State University	0	3	2	16	6	10	11	0	11	64
University of New Mexico	8	7	0	13	13	0	10	24	65	165
New York, total	56	112	93	573	525	48	381	444	1,347	3,896
Adelphi University	0	0	0	0	0	0	24	0	13	37
Albany Medical College	0	0	0	8	8	0	0	0	0	8
Alfred University	0	0	0	0	0	0	0	0	0	5
Clarkson University	0	1	0	3	3	0	0	0	0	47
Columbia U in City of New York	10	10	8	40	40	0	24	67	169	437
Cornell U Medical Campus	0	0	0	24	24	0	0	0	0	24
Cornell U Endowed Colleges	9	21	16	127	85	42	13	94	106	572
CUNY Grad School & U Center	4	5	6	53	53	0	38	47	79	286
Fordham University	0	1	0	6	6	0	25	15	51	98
Hofstra University	0	0	0	0	0	0	44	0	20	64
Jewish Theological Sem America	0	0	0	0	0	0	0	0	5	5
Juilliard School	0	0	0	0	0	0	0	0	6	6
Long Island University Brooklyn	0	0	0	0	0	0	10	0	0	10
Manhattan School of Music	0	0	0	0	0	0	0	0	11	11
New School For Social Research	0	0	0	0	0	0	20	19	1	40
New York Medical College	0	0	0	10	10	0	0	0	0	10
New York University	0	15	15	29	29	0	38	36	228	381
Pace University New York Campus	0	0	0	0	0	0	0	0	7	7
Polytechnic University	0	6	2	1	1	0	0	0	0	51
Rensselaer Polytechnic Institute	3	11	9	3	3	0	0	4	15	179
Rockefeller University	0	0	0	24	24	0	0	0	0	25
St John's U (Jamaica, NY)	0	0	0	3	3	0	12	0	15	31
Syracuse University	3	5	11	8	8	0	14	32	60	177
SUNY at Albany	1	6	3	10	10	0	20	31	37	126
SUNY at Binghamton	3	4	4	5	5	0	20	22	22	95
SUNY at Buffalo	4	4	7	56	56	0	31	27	154	350
SUNY at Stony Brook	16	15	7	58	58	0	15	23	65	269
SUNY Col Environ Sci & Forestry	2	0	0	14	8	6	0	0	0	19
SUNY Health Sci Ctr Brooklyn	0	0	0	18	18	0	0	0	0	18
SUNY Health Sci Ctr Syracuse	0	0	0	14	14	0	0	0	0	14
Teachers College Columbia U	0	0	0	0	0	0	0	0	200	200
Union Theological Seminary	0	0	0	0	0	0	0	0	5	5
University of Rochester	1	8	5	34	34	0	15	27	69	236
Yeshiva University	0	0	0	25	25	0	18	0	9	53
North Carolina, total	24	32	11	218	165	53	57	75	337	984
Campbell University	0	0	0	0	0	0	0	0	10	10
Duke University	4	5	2	42	41	1	7	30	55	204
East Carolina University	0	0	0	8	8	0	0	0	3	11
North Carolina State U Raleigh	10	17	2	79	27	52	12	15	51	301
U of North Carolina Chapel Hill	10	10	7	78	78	0	24	30	162	370
U of North Carolina Greensboro	0	0	0	2	2	0	14	0	56	72
Wake Forest University	0	0	0	9	9	0	0	0	0	16
North Dakota, total	0	2	7	25	15	10	12	0	22	74
North Dakota State University	0	2	7	17	7	10	0	0	0	30
University of North Dakota	0	0	0	8	8	0	12	0	22	44

See explanatory information, if any, and SOURCE at end of table.

Table 6. Institutions conferring science and engineering (S&E) doctorates, by State, institution, and major field: 1994

[To increase readability, fields span 2 pages and institutions are repeated on facing pages]

State and institution	S&E rank	Total S&E	Engineering						Physical sciences			
			Total	Chemical	Civil	Electrical	Mechanical	Other engineering	Total	Physics & astronomy	Chemistry	Other physical sciences
Ohio, total	7	1,081	324	52	27	72	50	123	201	62	139	0
Air Force Institute Technology	130	24	20	0	0	9	0	11	4	4	0	0
Bowling Green State University	115	40	0	0	0	0	0	0	4	0	4	0
Case Western Reserve University	59	144	61	16	3	8	9	25	29	2	27	0
Cleveland State University	139	15	10	2	0	2	3	3	3	0	3	0
Hebrew Union Col-Jewish Inst Relig	154	0	0	0	0	0	0	0	0	0	0	0
Kent State University	100	57	0	0	0	0	0	0	14	10	4	0
Medical College of Ohio	142	12	0	0	0	0	0	0	0	0	0	0
Miami University Oxford Campus	129	25	0	0	0	0	0	0	1	0	1	0
Ohio State University	10	406	97	9	8	18	20	42	67	23	44	0
Ohio University	116	39	8	1	0	6	0	1	9	7	2	0
University of Akron	82	88	27	15	4	2	3	3	33	8	25	0
University of Cincinnati	42	171	71	7	12	16	10	26	25	5	20	0
University of Dayton	141	13	12	0	0	4	4	4	0	0	0	0
University of Toledo	116	39	16	2	0	6	1	7	12	3	9	0
Wright State University	146	8	2	0	0	1	0	1	0	0	0	0
Oklahoma, total	30	224	55	22	6	9	9	9	30	14	16	0
Oklahoma State Univ	69	115	23	6	4	5	4	4	19	10	9	0
University of Oklahoma, Norman	80	90	22	6	2	4	5	5	11	4	7	0
University of Tulsa	135	19	10	10	0	0	0	0	0	0	0	0
Oregon, total	24	316	35	3	10	8	5	9	34	20	14	0
Oregon Grad Inst Science & Tech	141	13	4	0	1	0	0	3	2	1	1	0
Oregon Health Sciences U	141	13	0	0	0	0	0	0	0	0	0	0
Oregon State University	49	159	28	3	9	6	5	5	13	4	9	0
Portland State University	134	20	3	0	0	2	0	1	0	0	0	0
University of Oregon	72	111	0	0	0	0	0	0	19	15	4	0
Pennsylvania, total	6	1,314	394	51	36	107	67	133	181	63	112	6
Bryn Mawr College	139	15	0	0	0	0	0	0	3	0	3	0
Carnegie Mellon University	60	142	83	10	8	38	9	18	11	6	5	0
Drexel University	102	55	39	2	8	15	8	6	6	1	5	0
Duquesne University	153	1	0	0	0	0	0	0	1	0	1	0
Indiana University Pennsylvania	146	8	0	0	0	0	0	0	0	0	0	0
Lehigh University	85	79	41	8	8	9	4	12	16	11	5	0
Medical Col PA, the	142	12	0	0	0	0	0	0	0	0	0	0
Medical Col PA & Hahnemann U	145	9	0	0	0	0	0	0	0	0	0	0
Pennsylvania State U	13	380	148	14	7	27	36	64	64	20	40	4
Philadelphia Col Pharmacy & Sci	150	4	0	0	0	0	0	0	2	0	2	0
Temple University	70	113	2	0	0	2	0	0	10	2	8	0
Thomas Jefferson University	128	26	0	0	0	0	0	0	0	0	0	0
University of Pennsylvania	19	294	53	9	1	9	6	28	26	9	15	2
University of Pittsburgh	41	172	28	8	4	7	4	5	38	14	24	0
Villanova University	150	4	0	0	0	0	0	0	4	0	4	0
Westminster Theological Seminary	154	0	0	0	0	0	0	0	0	0	0	0
Widener U Pennsylvania Campus	154	0	0	0	0	0	0	0	0	0	0	0
Rhode Island, total	32	196	38	5	0	9	11	13	41	17	24	0
Brown University	67	120	20	1	0	3	6	10	27	13	14	0
University of Rhode Island	86	76	18	4	0	6	5	3	14	4	10	0
South Carolina, total	31	209	42	4	6	8	10	14	31	9	22	0
Clemson University	79	93	33	3	4	5	8	13	11	4	7	0
Medical U South Carolina	135	19	1	0	0	0	0	1	0	0	0	0
South Carolina State University	154	0	0	0	0	0	0	0	0	0	0	0
U of South Carolina at Columbia	78	97	8	1	2	3	2	0	20	5	15	0
South Dakota, total	49	29	4	0	1	0	0	3	2	0	2	0
South Dakota Sch of Mines & Tech	150	4	4	0	1	0	0	3	0	0	0	0
South Dakota State University	139	15	0	0	0	0	0	0	2	0	2	0
University of South Dakota	144	10	0	0	0	0	0	0	0	0	0	0

See explanatory information, if any, and SOURCE at end of table.

Table 6. Institutions conferring science and engineering (S&E) doctorates, by State, institution, and major field: 1994

[To increase readability, fields span 2 pages and institutions are repeated on facing pages]

State and institution	Earth, atmos. ocean	Mathematics	Computer sciences	Biological & agricultural sciences			Psychology	Social sciences	Non-S&E, total	Grand total, all fields
				Total	Biological	Agricultural				
Ohio, total	18	45	19	207	178	29	152	115	702	1,783
Air Force Institute Technology	0	0	0	0	0	0	0	0	0	24
Bowling Green State University	0	4	0	7	7	0	17	8	28	68
Case Western Reserve University	0	4	4	32	32	0	10	4	43	187
Cleveland State University	0	0	0	2	2	0	0	0	14	29
Hebrew Union Col-Jewish Inst Relig	0	0	0	0	0	0	0	0	3	3
Kent State University	1	3	2	10	10	0	23	4	73	130
Medical College of Ohio	0	0	0	12	12	0	0	0	4	16
Miami University Oxford Campus	1	0	0	8	8	0	11	4	14	39
Ohio State University	9	20	13	83	54	29	37	80	296	702
Ohio University	0	0	0	12	12	0	10	0	63	102
University of Akron	0	0	0	0	0	0	22	6	22	110
University of Cincinnati	7	13	0	31	31	0	15	9	101	272
University of Dayton	0	0	0	1	1	0	0	0	6	19
University of Toledo	0	1	0	3	3	0	7	0	35	74
Wright State University	0	0	0	6	6	0	0	0	0	8
Oklahoma, total	14	4	11	47	32	15	25	38	181	405
Oklahoma State University	5	2	4	30	15	15	12	20	90	205
University of Oklahoma Norman	8	2	6	17	17	0	6	18	79	169
University of Tulsa	1	0	1	0	0	0	7	0	12	31
Oregon, total	21	12	17	105	64	41	38	54	174	490
Oregon Grad Inst Science & Tech	3	0	1	3	3	0	0	0	0	13
Oregon Health Sciences U	0	0	0	11	11	0	2	0	10	23
Oregon State University	13	6	8	74	33	41	7	10	40	199
Portland State University	0	0	1	0	0	0	0	16	11	31
University of Oregon	5	6	7	17	17	0	29	28	113	224
Pennsylvania, total	31	51	53	254	242	12	125	225	793	2,107
Bryn Mawr College	0	1	0	1	1	0	0	10	13	28
Carnegie Mellon University	0	11	15	7	7	0	7	8	25	167
Drexel University	1	1	3	0	0	0	5	0	4	59
Duquesne University	0	0	0	0	0	0	0	0	13	14
Indiana University Pennsylvania	0	0	0	0	0	0	0	8	37	45
Lehigh University	2	5	4	2	2	0	5	4	29	108
Medical Col PA, the	0	0	0	12	12	0	0	0	0	12
Medical Col PA & Hahnemann U	0	0	0	8	8	0	1	0	2	11
Pennsylvania State U	23	10	6	70	58	12	32	27	150	530
Philadelphia Col Pharmacy & Sci	0	0	0	2	2	0	0	0	0	4
Temple University	0	8	3	25	25	0	37	28	176	289
Thomas Jefferson University	0	0	0	26	26	0	0	0	0	26
University of Pennsylvania	2	9	17	65	65	0	18	104	165	459
University of Pittsburgh	3	6	5	36	36	0	20	36	157	329
Villanova University	0	0	0	0	0	0	0	0	0	4
Westminster Theological Seminary	0	0	0	0	0	0	0	0	8	8
Widener U Pennsylvania Campus	0	0	0	0	0	0	0	0	14	14
Rhode Island, total	16	22	2	30	26	4	25	22	56	252
Brown University	7	18	2	18	18	0	7	21	42	162
University of Rhode Island	9	4	0	12	8	4	18	1	14	90
South Carolina, total	15	18	7	67	57	10	9	20	234	443
Clemson University	3	11	5	28	18	10	0	2	22	115
Medical U South Carolina	0	0	0	18	18	0	0	0	4	23
South Carolina State University	0	0	0	0	0	0	0	0	17	17
U of South Carolina at Columbia	12	7	2	21	21	0	9	18	191	288
South Dakota, total	0	0	0	12	6	6	7	4	30	59
South Dakota Sch of Mines & Tech	0	0	0	0	0	0	0	0	0	4
South Dakota State University	0	0	0	9	3	6	0	4	0	15
University of South Dakota	0	0	0	3	3	0	7	0	30	40

See explanatory information, if any, and SOURCE at end of table.

Table 6. Institutions conferring science and engineering (S&E) doctorates, by State, institution, and major field: 1994

[To increase readability, fields span 2 pages and institutions are repeated on facing pages]

State and institution	S&E rank	Total S&E	Engineering						Physical sciences			
			Total	Chemical	Civil	Electrical	Mechanical	Other engineering	Total	Physics & astronomy	Chemistry	Other physical sciences
Tennessee, total	23	336	68	7	17	19	9	16	35	14	21	0
East Tennessee State University	144	10	0	0	0	0	0	0	0	0	0	0
Geo Peabody Col Teachers	154	0	0	0	0	0	0	0	0	0	0	0
Meharry Medical College	146	8	0	0	0	0	0	0	0	0	0	0
Mid America Baptist Theol Seminary	154	0	0	0	0	0	0	0	0	0	0	0
Middle Tennessee State U	149	5	0	0	0	0	0	0	0	0	0	0
Tennessee State University	154	0	0	0	0	0	0	0	0	0	0	0
Tennessee Technological U	139	15	15	2	1	5	6	1	0	0	0	0
University of Memphis	110	46	3	0	0	2	0	1	2	0	2	0
University Tennessee Knoxville	58	145	24	3	6	4	3	8	21	9	12	0
University Tennessee Memphis	147	7	0	0	0	0	0	0	0	0	0	0
Vanderbilt University	76	100	26	2	10	8	0	6	12	5	7	0
Texas, total	3	1,616	437	88	66	112	64	107	241	103	137	1
Baylor College of Medicine	110	46	0	0	0	0	0	0	0	0	0	0
Baylor University	146	8	0	0	0	0	0	0	3	2	1	0
Dallas Theological Seminary	154	0	0	0	0	0	0	0	0	0	0	0
East Texas State University	147	7	0	0	0	0	0	0	0	0	0	0
Lamar University-Beaumont	151	3	3	1	1	0	0	1	0	0	0	0
Rice University	79	93	20	10	1	6	1	2	31	18	12	1
Sam Houston State University	149	5	0	0	0	0	0	0	0	0	0	0
Southern Methodist University	112	44	15	0	0	11	1	3	0	0	0	0
Southwestern Baptist Theol Sem	154	0	0	0	0	0	0	0	0	0	0	0
St Mary's University	149	5	0	0	0	0	0	0	0	0	0	0
Texas A&M University Kingsville	154	0	0	0	0	0	0	0	0	0	0	0
Texas A&M University	7	434	135	19	16	34	19	47	61	9	52	0
Texas Christian University	143	11	0	0	0	0	0	0	3	0	3	0
Texas Southern University	154	0	0	0	0	0	0	0	0	0	0	0
Texas Tech University	71	112	21	2	4	4	3	8	20	5	15	0
Texas Woman's University	119	36	0	0	0	0	0	0	0	0	0	0
University of Dallas	153	1	0	0	0	0	0	0	0	0	0	0
University of Houston	69	115	41	17	6	7	0	11	21	9	12	0
U North TX	93	64	1	0	0	0	0	1	14	9	5	0
U North TX Hlth Sci Ctr Ft Worth	149	5	0	0	0	0	0	0	0	0	0	0
University of St Thomas	154	0	0	0	0	0	0	0	0	0	0	0
U Texas at Arlington	108	48	28	0	5	9	8	6	6	2	4	0
U Texas at Austin	9	421	168	39	33	38	32	26	68	39	29	0
U Texas at Dallas	113	42	3	0	0	3	0	0	12	8	4	0
U Texas at El Paso	150	4	0	0	0	0	0	0	0	0	0	0
U Texas Hlth Sci Ctr Houston	113	42	0	0	0	0	0	0	1	1	0	0
U Texas Hlth Sci Ctr San Antonio	135	19	0	0	0	0	0	0	0	0	0	0
U Texas Med Branch Galveston	140	14	0	0	0	0	0	0	0	0	0	0
U Texas SW Med Ctr Dallas	118	37	2	0	0	0	0	2	1	1	0	0
Utah, total	29	239	56	6	11	5	15	19	49	11	38	0
Brigham Young University	108	48	7	0	3	2	2	0	11	3	8	0
University of Utah	62	138	37	6	0	3	13	15	34	6	28	0
Utah State University	104	53	12	0	8	0	0	4	4	2	2	0
Vermont, total	45	50	5	0	1	2	0	2	6	0	6	0
Middlebury College	154	0	0	0	0	0	0	0	0	0	0	0
University of Vermont	107	50	5	0	1	2	0	2	6	0	6	0
Virginia, total	14	609	162	14	11	29	34	74	69	25	44	0
College of William and Mary	125	29	0	0	0	0	0	0	8	7	1	0
George Mason University	99	58	5	0	0	4	0	1	0	0	0	0
Old Dominion University	120	35	15	0	0	0	6	9	1	1	0	0
Regent University	154	0	0	0	0	0	0	0	0	0	0	0
Union Theological Sem Virginia	154	0	0	0	0	0	0	0	0	0	0	0
University of Virginia	48	162	44	5	4	12	4	19	24	12	12	0
Virginia Commonwealth University	84	81	0	0	0	0	0	0	9	0	9	0
Virginia Polytechnic Inst & St U	28	244	98	9	7	13	24	45	27	5	22	0

See explanatory information, if any, and SOURCE at end of table.

Table 6. Institutions conferring science and engineering (S&E) doctorates, by State, institution, and major field: 1994

[To increase readability, fields span 2 pages and institutions are repeated on facing pages]

State and institution	Earth, atmos, ocean	Mathematics	Computer sciences	Biological & agricultural sciences			Psychology	Social sciences	Non-S&E, total	Grand total, all fields
				Total	Biological	Agricultural				
Tennessee, total	7	13	5	97	89	8	67	44	314	650
East Tennessee State University	0	0	0	10	10	0	0	0	24	34
Geo Peabody Col Teachers	0	0	0	0	0	0	0	0	47	47
Meharry Medical College	0	0	0	8	8	0	0	0	0	8
Mid-America Baptist Theol Seminary	0	0	0	0	0	0	0	0	10	10
Middle Tennessee State U	0	0	0	1	1	0	0	4	13	18
Tennessee State University	0	0	0	0	0	0	0	0	26	26
Tennessee Technological U	0	0	0	0	0	0	0	0	0	15
University of Memphis	0	4	2	3	3	0	31	1	67	113
University Tennessee Knoxville	7	5	1	41	33	8	21	25	81	226
University Tennessee Memphis	0	0	0	7	7	0	0	0	5	12
Vanderbilt University	0	4	2	27	27	0	15	14	41	141
Texas, total	71	47	54	403	325	78	186	177	1,029	2,645
Baylor College of Medicine	0	0	0	46	46	0	0	0	3	49
Baylor University	1	2	0	1	1	0	1	0	29	37
Dallas Theological Seminary	0	0	0	0	0	0	0	0	9	9
East Texas State University	0	0	0	0	0	0	7	0	43	50
Lamar University-Beaumont	0	0	0	0	0	0	0	0	0	3
Rice University	10	4	4	10	10	0	3	11	15	108
Sam Houston State University	0	0	0	0	0	0	0	5	0	5
Southern Methodist University	4	6	3	2	2	0	2	12	3	47
Southwestern Baptist Theol Sem	0	0	0	0	0	0	0	0	49	49
St Mary's University	0	0	0	0	0	0	5	0	0	5
Texas A&M University Kingsville	0	0	0	0	0	0	0	0	4	4
Texas A&M University	21	13	15	125	63	62	21	43	154	588
Texas Christian University	0	0	0	0	0	0	8	0	12	23
Texas Southern University	0	0	0	0	0	0	0	0	14	14
Texas Tech University	4	1	3	30	14	16	22	11	56	168
Texas Woman's University	0	0	0	3	3	0	27	6	67	103
University of Dallas	0	0	0	0	0	0	1	0	0	1
University of Houston	3	4	2	11	11	0	24	9	89	204
U North TX	0	3	6	15	15	0	17	8	111	175
U North TX Hlth Sci Ctr Ft Worth	0	0	0	5	5	0	0	0	0	5
University of St Thomas	0	0	0	0	0	0	0	0	2	2
U Texas at Arlington	0	5	3	1	1	0	2	3	28	76
U Texas at Austin	17	8	16	52	52	0	35	57	291	712
U Texas at Dallas	5	1	2	4	4	0	3	12	14	56
U Texas at El Paso	4	0	0	0	0	0	0	0	0	4
U Texas Hlth Sci Ctr Houston	2	0	0	39	39	0	0	0	33	75
U Texas Hlth Sci Ctr San Antonio	0	0	0	19	19	0	0	0	1	20
U Texas Med Branch Galveston	0	0	0	14	14	0	0	0	1	15
U Texas SW Med Ctr Dallas	0	0	0	26	26	0	8	0	1	38
Utah, total	7	8	5	53	43	10	39	22	96	335
Brigham Young University	0	0	2	6	5	1	17	5	24	72
University of Utah	6	7	3	28	28	0	10	13	64	202
Utah State University	1	1	0	19	10	9	12	4	8	61
Vermont, total	0	0	0	23	22	1	16	0	13	63
Middlebury College	0	0	0	0	0	0	0	0	1	1
University of Vermont	0	0	0	23	22	1	16	0	12	62
Virginia, total	23	21	28	142	110	32	72	92	322	931
College of William and Mary	10	0	4	5	4	1	0	2	28	57
George Mason University	1	2	10	3	3	0	15	22	20	78
Old Dominion University	5	0	3	3	3	0	1	7	6	41
Regent University	0	0	0	0	0	0	0	0	6	6
Union Theological Sem Virginia	0	0	0	0	0	0	0	0	1	1
University of Virginia	2	9	5	28	28	0	18	32	129	291
Virginia Commonwealth University	0	0	0	44	44	0	18	10	32	113
Virginia Polytechnic Inst & St U	5	10	6	59	28	31	20	19	100	344

See explanatory information, if any, and SOURCE at end of table.

Table 6. Institutions conferring science and engineering (S&E) doctorates, by State, institution, and major field: 1994

[To increase readability, fields span 2 pages and institutions are repeated on facing pages]

State and institution	S&E rank	Total S&E	Engineering						Physical sciences			
			Total	Chemical	Civil	Electrical	Mechanical	Other engineering	Total	Physics & astronomy	Chemistry	Other physical sciences
Washington, total	20	443	86	11	8	30	19	18	54	20	34	0
Gonzaga University	154	0	0	0	0	0	0	0	0	0	0	0
Seattle University	154	0	0	0	0	0	0	0	0	0	0	0
University of Washington	20	293	51	5	3	18	11	14	45	14	31	0
Washington State University	55	150	35	6	5	12	8	4	9	6	3	0
West Virginia, total	41	67	25	4	1	5	6	9	5	2	3	0
Marshall University	153	1	0	0	0	0	0	0	0	0	0	0
West Virginia University	92	66	25	4	1	5	6	9	5	2	3	0
Wisconsin, total	11	661	148	17	16	43	16	56	109	44	64	1
Marquette University	139	15	7	0	2	2	0	3	2	0	2	0
Medical College of Wisconsin	137	17	0	0	0	0	0	0	0	0	0	0
U of Wisconsin-Madison	2	569	133	17	13	36	16	51	89	38	50	1
U of Wisconsin-Milwaukee	97	60	8	0	1	5	0	2	18	6	12	0
Wyoming, total	44	51	2	2	0	0	0	0	9	2	7	0
University of Wyoming	106	51	2	2	0	0	0	0	9	2	7	0
Puerto Rico, total	48	34	0	0	0	0	0	0	7	1	6	0
Caribbean Ctr for Adv Studies	152	2	0	0	0	0	0	0	0	0	0	0
Ctr Adv Studies PR & Caribbean	144	10	0	0	0	0	0	0	0	0	0	0
Inter American U PR Metropolitan	154	0	0	0	0	0	0	0	0	0	0	0
University of PR Rio Piedras	132	22	0	0	0	0	0	0	7	1	6	0

See explanatory information, if any, and SOURCE at end of table.

Table 6. Institutions conferring science and engineering (S&E) doctorates, by State, institution, and major field: 1994

[To increase readability, fields span 2 pages and institutions are repeated on facing pages]

State and institution	Earth, atmos, ocean	Mathematics	Computer sciences	Biological & agricultural sciences			Psychology	Social sciences	Non-S&E, total	Grand total, all fields
				Total	Biological	Agricultural				
Washington, total	34	23	12	140	96	44	31	63	256	699
Gonzaga University	0	0	0	0	0	0	0	0	19	19
Seattle University	0	0	0	0	0	0	0	0	23	23
University of Washington	26	18	11	92	65	27	15	35	162	455
Washington State University	8	5	1	48	31	17	16	28	52	202
West Virginia, total	1	1	0	18	17	1	12	5	60	127
Marshall University	0	0	0	1	1	0	0	0	0	1
West Virginia University	1	1	0	17	16	1	12	5	60	126
Wisconsin, total	17	42	21	183	135	48	49	92	281	942
Marquette University	0	2	0	2	2	0	2	0	36	51
Medical College of Wisconsin	0	0	0	17	17	0	0	0	0	17
U of Wisconsin-Madison	17	36	21	155	107	48	38	80	213	782
U of Wisconsin-Milwaukee	0	4	0	9	9	0	9	12	32	92
Wyoming, total	9	3	0	18	12	6	6	4	22	73
University of Wyoming	9	3	0	18	12	6	6	4	22	73
Puerto Rico, total	0	0	0	6	6	0	20	1	29	63
Caribbean Ctr for Adv Studies	0	0	0	0	0	0	2	0	0	2
Ctr Adv Studies PR & Caribbean	0	0	0	0	0	0	10	0	0	10
Inter American U PR Metropolitan	0	0	0	0	0	0	0	0	13	13
University of PR Rio Piedras	0	0	0	6	6	0	8	1	16	38

KEY: - = Not applicable

SOURCE: National Science Foundation/SRS, Survey of Earned Doctorates

Table 7. Postgraduation plans of science and engineering (S&E) doctorate recipients, by citizenship status and major field: 1994

Field of study	Total	Definite plans								
		Total with definite plans	In the United States					Abroad	Location unknown
			Total in U.S.	Postdoc study	Academic employment	Industry employment	Other		
	All recipients								
Science and engineering, total	26,211	15,620	13,245	5,978	2,946	2,631	1,690	2,316	59
Engineering, total	5,826	2,953	2,303	594	335	1,098	276	635	15
Aeronautical/astronautical	230	104	83	26	14	25	18	20	1
Chemical	725	423	318	100	20	177	21	99	6
Civil	684	324	220	42	49	82	47	102	2
Electrical	1,675	906	748	114	105	456	73	158	0
Industrial	228	117	79	11	31	26	11	38	0
Materials/metallurgical	539	288	227	104	12	92	19	58	3
Mechanical	1,015	435	354	104	49	156	45	80	1
Other engineering	730	356	274	93	55	84	42	80	2
Sciences, total	20,385	12,667	10,942	5,384	2,611	1,533	1,414	1,681	44
Physical sciences, total	3,975	2,415	2,085	1,363	159	464	99	312	18
Astronomy	143	105	92	71	8	3	10	13	0
Chemistry	2,254	1,461	1,301	807	100	355	39	147	13
Physics	1,549	834	682	481	50	104	47	147	5
Other physical sciences	29	15	10	4	1	2	3	5	0
Earth, atmospheric, and ocean sciences	824	499	418	207	78	66	67	80	1
Mathematics	1,118	599	473	122	254	69	28	124	2
Computer sciences	904	552	458	61	165	196	36	92	2
Biological sciences	5,197	3,603	3,293	2,691	277	169	156	298	12
Agricultural sciences	1,078	636	428	182	87	96	63	206	2
Psychology	3,389	2,127	2,044	600	518	319	607	82	1
Social sciences	3,900	2,236	1,743	158	1,073	154	358	487	6
Non-S&E, total	14,800	9,278	8,396	445	4,798	551	2,602	872	10
Grand total, all fields	41,011	24,898	21,641	6,423	7,744	3,182	4,292	3,188	69
	U.S. citizens								
Science and engineering, total	15,149	10,179	9,729	3,964	2,433	1,818	1,514	440	10
Engineering, total	2,211	1,421	1,355	263	231	621	240	64	2
Aeronautical/astronautical	110	66	64	19	11	18	16	2	0
Chemical	293	209	196	42	17	118	19	11	2
Civil	203	130	124	15	30	41	38	6	0
Electrical	633	435	415	53	65	233	64	20	0
Industrial	89	55	53	4	23	15	11	2	0
Materials/metallurgical	218	143	132	44	10	60	18	11	0
Mechanical	356	203	196	40	36	83	37	7	0
Other engineering	309	180	175	46	39	53	37	5	0
Sciences, total	12,938	8,758	8,374	3,701	2,202	1,197	1,274	376	8
Physical sciences, total	2,195	1,495	1,396	813	144	354	85	97	2
Astronomy	102	80	75	55	8	3	9	5	0
Chemistry	1,289	932	885	476	96	281	32	45	2
Physics	789	475	428	279	39	68	42	47	0
Other physical sciences	15	8	8	3	1	2	2	0	0
Earth, atmospheric, and ocean sciences	506	329	309	137	68	46	58	20	0
Mathematics	496	313	295	59	178	38	20	18	0
Computer sciences	426	292	275	34	112	96	33	16	1
Biological sciences	3,415	2,508	2,406	1,887	241	144	134	100	2
Agricultural sciences	519	339	319	95	79	85	60	19	1
Psychology	3,060	1,991	1,963	559	497	312	595	28	0
Social sciences	2,321	1,491	1,411	117	883	122	289	78	2
Non-S&E, total	11,956	7,926	7,741	349	4,350	494	2,548	181	4
Grand total, all fields	27,105	18,105	17,470	4,313	6,783	2,312	4,062	621	14

See explanatory information, if any, and SOURCE at end of table.

Table 7. Postgraduation plans of science and engineering (S&E) doctorate recipients, by citizenship status and major field: 1994

Field of study	Total	Definite plans							
		Total with definite plans	In the United States				Abroad	Location unknown
			Total in U.S.	Postdoc study	Academic employment	Industry employment	Other		
	Non-U.S. citizens with permanent visas								
Science and engineering, total	3,022	1,461	1,322	726	184	336	76	127	12
Engineering, total	839	343	301	78	30	174	19	39	3
Aeronautical/astronautical	20	2	2	0	0	2	0	0	0
Chemical	87	36	30	14	2	14	0	5	1
Civil	89	35	29	5	2	15	7	6	0
Electrical	266	129	120	13	12	90	5	9	0
Industrial	30	11	8	2	2	4	0	3	0
Materials/metallurgical	79	34	30	15	1	14	0	3	1
Mechanical	179	59	52	17	5	25	5	7	0
Other engineering	89	37	30	12	6	10	2	6	1
Sciences, total	2,183	1,118	1,021	648	154	162	57	88	9
Physical sciences, total	590	261	244	178	9	51	6	13	4
Astronomy	9	5	5	4	0	0	1	0	0
Chemistry	324	156	148	108	2	36	2	5	3
Physics	255	98	89	65	7	15	2	8	1
Other physical sciences	2	2	2	1	0	0	1	0	0
Earth, atmospheric, and ocean sciences	106	63	57	33	6	13	5	5	1
Mathematics	151	57	52	13	20	18	1	5	0
Computer sciences	117	64	61	7	14	39	1	3	0
Biological sciences	668	434	412	366	23	9	14	18	4
Agricultural sciences	97	45	35	25	4	6	0	10	0
Psychology	85	46	38	13	10	7	8	8	0
Social sciences	369	148	122	13	68	19	22	26	0
Non-S&E, total	719	347	286	36	191	28	31	60	1
Grand total, all fields	3,741	1,808	1,608	762	375	364	107	187	13
	Non-U.S. citizens with temporary visas								
Science and engineering, total	7,510	3,972	2,191	1,287	327	477	100	1,744	37
Engineering, total	2,656	1,188	647	253	74	303	17	531	10
Aeronautical/astronautical	96	36	17	7	3	5	2	18	1
Chemical	336	178	92	44	1	45	2	83	3
Civil	385	159	67	22	17	26	2	90	2
Electrical	737	342	213	48	28	133	4	129	0
Industrial	109	51	18	5	6	7	0	33	0
Materials/metallurgical	233	110	65	45	1	18	1	43	2
Mechanical	459	173	106	47	8	48	3	66	1
Other engineering	301	139	69	35	10	21	3	69	1
Sciences, total	4,854	2,784	1,544	1,034	253	174	83	1,213	27
Physical sciences, total	1,108	657	444	371	6	59	8	201	12
Astronomy	32	20	12	12	0	0	0	8	0
Chemistry	597	372	267	222	2	38	5	97	8
Physics	472	260	165	137	4	21	3	91	4
Other physical sciences	7	5	0	0	0	0	0	5	0
Earth, atmospheric, and ocean sciences	196	106	52	37	4	7	4	54	0
Mathematics	437	228	126	50	56	13	7	100	2
Computer sciences	344	196	122	20	39	61	2	73	1
Biological sciences	1,056	660	474	438	12	16	8	180	6
Agricultural sciences	453	252	74	62	4	5	3	177	1
Psychology	151	90	43	28	11	0	4	46	1
Social sciences	1,109	595	209	28	121	13	47	382	4
Non-S&E, total	1,883	1,002	388	60	256	29	23	629	5
Grand total, all fields	9,393	4,974	2,559	1,347	583	506	123	2,373	42

SOURCE: National Science Foundation/SRS, Survey of Earned Doctorates

Table 8. Percentage distribution of definite postgraduation plans of science and engineering (S&E) doctorate recipients, by citizenship status and major field: 1994

Field of study	Definite plans	In the United States					Abroad	Location unknown
		Total in U.S.	Postdoc study	Academic employment	Industry employment	Other		
	All recipients							
Science and engineering, total	100.0	84.8	38.3	18.9	16.8	10.8	14.8	0.4
Engineering, total	100.0	78.0	20.1	11.3	37.2	9.3	21.5	.5
Aeronautical/astronautical	100.0	79.8	25.0	13.5	24.0	17.3	19.2	1.0
Chemical	100.0	75.2	23.6	4.7	41.8	5.0	23.4	1.4
Civil	100.0	67.9	13.0	15.1	25.3	14.5	31.5	.6
Electrical	100.0	82.6	12.6	11.6	50.3	8.1	17.4	.0
Industrial	100.0	67.5	9.4	26.5	22.2	9.4	32.5	.0
Materials/metallurgical	100.0	78.8	36.1	4.2	31.9	6.6	20.1	1.0
Mechanical	100.0	81.4	23.9	11.3	35.9	10.3	18.4	.2
Other engineering	100.0	77.0	26.1	15.4	23.6	11.8	22.5	.6
Sciences, total	100.0	86.4	42.5	20.6	12.1	11.2	13.3	.3
Physical sciences, total	100.0	86.3	56.4	6.6	19.2	4.1	12.9	.7
Astronomy	100.0	87.6	67.6	7.6	2.9	9.5	12.4	.0
Chemistry	100.0	89.0	55.2	6.8	24.3	2.7	10.1	.9
Physics	100.0	81.8	57.7	6.0	12.5	5.6	17.6	.6
Other physical sciences	100.0	66.7	26.7	6.7	13.3	20.0	33.3	.0
Earth, atmospheric, and ocean sciences	100.0	83.8	41.5	15.6	13.2	13.4	16.0	.2
Mathematics	100.0	79.0	20.4	42.4	11.5	4.7	20.7	.3
Computer sciences	100.0	83.0	11.1	29.9	35.5	6.5	16.7	.4
Biological sciences	100.0	91.4	74.7	7.7	4.7	4.3	8.3	.3
Agricultural sciences	100.0	67.3	28.6	13.7	15.1	9.9	32.4	.3
Psychology	100.0	96.1	28.2	24.4	15.0	28.5	3.9	.0
Social sciences	100.0	78.0	7.1	48.0	6.9	16.0	21.8	.3
Non-S&E, total	100.0	90.5	4.8	51.7	5.9	28.0	9.4	.1
Grand total, all fields	100.0	86.9	25.8	31.1	12.8	17.2	12.8	.3
	U.S. citizens							
Science and engineering, total	100.0	95.6	38.9	23.9	17.9	14.9	4.3	0.1
Engineering, total	100.0	95.4	18.5	16.3	43.7	16.9	4.5	.1
Aeronautical/astronautical	100.0	97.0	28.8	16.7	27.3	24.2	3.0	.0
Chemical	100.0	93.8	20.1	8.1	56.5	9.1	5.3	1.0
Civil	100.0	95.4	11.5	23.1	31.5	29.2	4.6	.0
Electrical	100.0	95.4	12.2	14.9	53.6	14.7	4.6	.0
Industrial	100.0	96.4	7.3	41.8	27.3	20.0	3.6	.0
Materials/metallurgical	100.0	92.3	30.8	7.0	42.0	12.6	7.7	.0
Mechanical	100.0	96.6	19.7	17.7	40.9	18.2	3.4	.0
Other engineering	100.0	97.2	25.6	21.7	29.4	20.6	2.8	.0
Sciences, total	100.0	95.6	42.3	25.1	13.7	14.5	4.3	.1
Physical sciences, total	100.0	93.4	54.4	9.6	23.7	5.7	6.5	.1
Astronomy	100.0	93.8	68.8	10.0	3.7	11.2	6.3	.0
Chemistry	100.0	95.0	51.1	10.3	30.2	3.4	4.8	.2
Physics	100.0	90.1	58.7	8.2	14.3	8.8	9.9	.0
Other physical sciences	100.0	100.0	37.5	12.5	25.0	25.0	0	.0
Earth, atmospheric, and ocean sciences	100.0	93.9	41.6	20.7	14.0	17.6	6.1	.0
Mathematics	100.0	94.2	18.8	56.9	12.1	6.4	5.8	.0
Computer sciences	100.0	94.2	11.6	38.4	32.9	11.3	5.5	.3
Biological sciences	100.0	95.9	75.2	9.6	5.7	5.3	4.0	.1
Agricultural sciences	100.0	94.1	28.0	23.3	25.1	17.7	5.6	.3
Psychology	100.0	98.6	28.1	25.0	15.7	29.9	1.4	.0
Social sciences	100.0	94.6	7.8	59.2	8.2	19.4	5.2	.1
Non-S&E, total	100.0	97.7	4.4	54.9	6.2	32.1	2.3	.1
Grand total, all fields	100.0	96.5	23.8	37.5	12.8	22.4	3.4	.1

See explanatory information, if any, and SOURCE at end of table.

Table 8. Percentage distribution of definite postgraduation plans of science and engineering (S&E) doctorate recipients, by citizenship status and major field: 1994

Field of study	Definite plans	In the United States					Abroad	Location unknown
		Total in U.S.	Postdoc study	Academic employment	Industry employment	Other		
	Non-U.S. citizens with permanent visas							
Science and engineering, total	100.0	90.5	49.7	12.6	23.0	5.2	8.7	0.8
Engineering, total	100.0	87.8	22.7	8.7	50.7	5.5	11.4	.9
Aeronautical/astronautical	100.0	100.0	.0	.0	100.0	.0	.0	.0
Chemical	100.0	83.3	38.9	5.6	38.9	.0	13.9	2.8
Civil	100.0	82.9	14.3	5.7	42.9	20.0	17.1	.0
Electrical	100.0	93.0	10.1	9.3	69.8	3.9	7.0	.0
Industrial	100.0	72.7	18.2	18.2	36.4	.0	27.3	.0
Materials/metallurgical	100.0	88.2	44.1	2.9	41.2	.0	8.8	2.9
Mechanical	100.0	88.1	28.8	8.5	42.4	8.5	11.9	.0
Other engineering	100.0	81.1	32.4	16.2	27.0	5.4	16.2	2.7
Sciences, total	100.0	91.3	58.0	13.8	14.5	5.1	7.9	.8
Physical sciences, total	100.0	93.5	68.2	3.4	19.5	2.3	5.0	1.5
Astronomy	100.0	100.0	80.0	.0	.0	20.0	.0	.0
Chemistry	100.0	94.9	69.2	1.3	23.1	1.3	3.2	1.9
Physics	100.0	90.8	66.3	7.1	15.3	2.0	8.2	1.0
Other physical sciences	100.0	100.0	50.0	.0	.0	50.0	.0	.0
Earth, atmospheric, and ocean sciences	100.0	90.5	52.4	9.5	20.6	7.9	7.9	1.6
Mathematics	100.0	91.2	22.8	35.1	31.6	1.8	8.8	.0
Computer sciences	100.0	95.3	10.9	21.9	60.9	1.6	4.7	.0
Biological sciences	100.0	94.9	84.3	5.3	2.1	3.2	4.1	.9
Agricultural sciences	100.0	77.8	55.6	8.9	13.3	.0	22.2	.0
Psychology	100.0	82.6	28.3	21.7	15.2	17.4	17.4	.0
Social sciences	100.0	82.4	8.8	45.9	12.8	14.9	17.6	.0
Non-S&E, total	100.0	82.4	10.4	55.0	8.1	8.9	17.3	.3
Grand total, all fields	100.0	88.9	42.1	20.7	20.1	5.9	10.3	.7
	Non-U.S. citizens with temporary visas							
Science and engineering, total	100.0	55.2	32.4	8.2	12.0	2.5	43.9	0.9
Engineering, total	100.0	54.5	21.3	6.2	25.5	1.4	44.7	.8
Aeronautical/astronautical	100.0	47.2	19.4	8.3	13.9	5.6	50.0	2.8
Chemical	100.0	51.7	24.7	.6	25.3	1.1	46.6	1.7
Civil	100.0	42.1	13.8	10.7	16.4	1.3	56.6	1.3
Electrical	100.0	62.3	14.0	8.2	38.9	1.2	37.7	.0
Industrial	100.0	35.3	9.8	11.8	13.7	.0	64.7	.0
Materials/metallurgical	100.0	59.1	40.9	.9	16.4	.9	39.1	1.8
Mechanical	100.0	61.3	27.2	4.6	27.7	1.7	38.2	.6
Other engineering	100.0	49.6	25.2	7.2	15.1	2.2	49.6	.7
Sciences, total	100.0	55.5	37.1	9.1	6.3	3.0	43.6	1.0
Physical sciences, total	100.0	67.6	56.5	.9	9.0	1.2	30.6	1.8
Astronomy	100.0	60.0	60.0	0	0	0	40.0	0
Chemistry	100.0	71.8	59.7	.5	10.2	1.3	26.1	2.2
Physics	100.0	63.5	52.7	1.5	8.1	1.2	35.0	1.5
Other physical sciences	100.0	.0	.0	.0	.0	0	100.0	.0
Earth, atmospheric, and ocean sciences	100.0	49.1	34.9	3.8	6.6	3.8	50.9	0
Mathematics	100.0	55.3	21.9	24.6	5.7	3.1	43.9	.9
Computer sciences	100.0	62.2	10.2	19.9	31.1	1.0	37.2	.5
Biological sciences	100.0	71.8	66.4	1.8	2.4	1.2	27.3	.9
Agricultural sciences	100.0	29.4	24.6	1.6	2.0	1.2	70.2	.4
Psychology	100.0	47.8	31.1	12.2	0	4.4	51.1	1.1
Social sciences	100.0	35.1	4.7	20.3	2.2	7.9	64.2	.7
Non-S&E, total	100.0	36.7	6.0	25.5	2.9	2.3	62.8	.5
Grand total, all fields	100.0	51.4	27.1	11.7	10.2	2.5	47.7	.8

SOURCE: National Science Foundation/SRS, Survey of Earned Doctorates

Table 9. Postgraduation plans of science and engineering (S&E) doctorate recipients, by sex and major field: 1994

[U.S. citizens and non-U.S. citizens with permanent visas]

Field of study	Total	Definite plans								
		Total with definite plans	In the United States					Abroad	Location unknown
			Total in U.S.	Postdoc study	Academic employment	Industry employment	Other		
	All such recipients								
Science and engineering, total	18,171	11,640	11,051	4,690	2,617	2,154	1,590	567	22
Engineering, total	3,050	1,764	1,656	341	261	795	259	103	5
Aeronautical/astronautical	130	68	66	19	11	20	16	2	0
Chemical	380	245	226	56	19	132	19	16	3
Civil	292	165	153	20	32	56	45	12	0
Electrical	899	564	535	66	77	323	69	29	0
Industrial	119	66	61	6	25	19	11	5	0
Materials/metallurgical	297	177	162	59	11	74	18	14	1
Mechanical	535	262	248	57	41	108	42	14	0
Other engineering	398	217	205	58	45	63	39	11	1
Sciences, total	15,121	9,876	9,395	4,349	2,356	1,359	1,331	464	17
Physical sciences, total	2,785	1,756	1,640	991	153	405	91	110	6
Astronomy	111	85	80	59	8	3	10	5	0
Chemistry	1,613	1,088	1,033	584	98	317	34	50	5
Physics	1,044	573	517	344	46	83	44	55	1
Other physical sciences	17	10	10	4	1	2	3	0	0
Earth, atmospheric, and ocean sciences	612	392	366	170	74	59	63	25	1
Mathematics	647	370	347	72	198	56	21	23	0
Computer sciences	543	356	336	41	126	135	34	19	1
Biological sciences	4,083	2,942	2,818	2,253	264	153	148	118	6
Agricultural sciences	616	384	354	120	83	91	60	29	1
Psychology	3,145	2,037	2,001	572	507	319	603	36	0
Social sciences	2,690	1,639	1,533	130	951	141	311	104	2
Non-S&E, total	12,675	8,273	8,027	385	4,541	522	2,579	241	5
Grand total, all fields	30,846	19,913	19,078	5,075	7,158	2,676	4,169	808	27
	Women								
Science and engineering, total	6,495	4,212	4,056	1,776	1,142	511	627	152	4
Engineering, total	448	278	268	75	57	95	41	10	0
Aeronautical/astronautical	9	6	6	2	2	2	0	0	0
Chemical	78	54	51	10	4	33	4	3	0
Civil	55	33	33	7	7	10	9	0	0
Electrical	88	54	53	10	12	25	6	1	0
Industrial	29	22	22	3	9	5	5	0	0
Materials/metallurgical	64	41	38	16	7	10	5	3	0
Mechanical	54	25	24	7	6	5	6	1	0
Other engineering	71	43	41	20	10	5	6	2	0
Sciences, total	6,047	3,934	3,788	1,701	1,085	416	586	142	4
Physical sciences, total	624	388	371	214	54	86	17	17	0
Astronomy	21	17	17	15	2	0	0	0	0
Chemistry	463	300	289	161	40	78	10	11	0
Physics	137	69	63	37	12	7	7	6	0
Other physical sciences	3	2	2	1	0	1	0	0	0
Earth, atmospheric, and ocean sciences	144	103	93	51	23	5	14	9	1
Mathematics	149	96	90	11	68	8	3	6	0
Computer sciences	94	59	57	9	26	17	5	2	0
Biological sciences	1,740	1,245	1,191	968	120	50	53	51	3
Agricultural sciences	160	89	84	32	18	17	17	5	0
Psychology	1,974	1,235	1,217	353	325	184	355	18	0
Social sciences	1,162	719	685	63	451	49	122	34	0
Non-S&E, total	7,007	4,617	4,522	230	2,596	278	1,418	91	4
Grand total, all fields	13,502	8,829	8,578	2,006	3,738	789	2,045	243	8

See explanatory information, if any, and SOURCE at end of table.

Table 9. Postgraduation plans of science and engineering (S&E) doctorate recipients, by sex and major field: 1994

[U.S. citizens and non-U.S. citizens with permanent visas]

Field of study	Total	Definite plans							
		Total with definite plans	In the United States				Abroad	Location unknown
			Total in U.S.	Postdoc study	Academic employment	Industry employment	Other		
	Men								
Science and engineering, total	11,676	7,428	6,995	2,914	1,475	1,643	963	415	18
Engineering, total	2,602	1,486	1,388	266	204	700	218	93	5
Aeronautical/astronautical	121	62	60	17	9	18	16	2	0
Chemical	302	191	175	46	15	99	15	13	3
Civil	237	132	120	13	25	46	36	12	0
Electrical	811	510	482	56	65	298	63	28	0
Industrial	90	44	39	3	16	14	6	5	0
Materials/metallurgical	233	136	124	43	4	64	13	11	1
Mechanical	481	237	224	50	35	103	36	13	0
Other engineering	327	174	164	38	35	58	33	9	1
Sciences, total	9,074	5,942	5,607	2,648	1,271	943	745	322	13
Physical sciences, total	2,161	1,368	1,269	777	99	319	74	93	6
Astronomy	90	68	63	44	6	3	10	5	0
Chemistry	1,150	788	744	423	58	239	24	39	5
Physics	907	504	454	307	34	76	37	49	1
Other physical sciences	14	8	8	3	1	1	3	0	0
Earth, atmospheric, and ocean sciences	468	289	273	119	51	54	49	16	0
Mathematics	498	274	257	61	130	48	18	17	0
Computer sciences	449	297	279	32	100	118	29	17	1
Biological sciences	2,343	1,697	1,627	1,285	144	103	95	67	3
Agricultural sciences	456	295	270	88	65	74	43	24	1
Psychology	1,171	802	784	219	182	135	248	18	0
Social sciences	1,528	920	848	67	500	92	189	70	2
Non-S&E, total	5,668	3,656	3,505	155	1,945	244	1,161	150	1
Grand total, all fields	17,344	11,084	10,500	3,069	3,420	1,887	2,124	565	19

SOURCE: National Science Foundation/SRS, Survey of Earned Doctorates

Table 10. Percentage distribution of definite postgraduation plans of science and engineering (S&E) doctorate recipients, by sex and major field: 1994

[U.S. citizens and non-U.S. citizens with permanent visas]

Field of study	Definite plans	In the United States					Abroad	Location unknown
		Total in U.S.	Postdoc study	Academic employment	Industry employment	Other		
	All such recipients							
Science and engineering, total	100.0	94.9	40.3	22.5	18.5	13.7	4.9	0.2
Engineering, total	100.0	93.9	19.3	14.8	45.1	14.7	5.8	.3
Aeronautical/astronautical	100.0	97.1	27.9	16.2	29.4	23.5	2.9	.0
Chemical	100.0	92.2	22.9	7.8	53.9	7.8	6.5	1.2
Civil	100.0	92.7	12.1	19.4	33.9	27.3	7.3	.0
Electrical	100.0	94.9	11.7	13.7	57.3	12.2	5.1	.0
Industrial	100.0	92.4	9.1	37.9	28.8	16.7	7.6	.0
Materials/metallurgical	100.0	91.5	33.3	6.2	41.8	10.2	7.9	.6
Mechanical	100.0	94.7	21.8	15.6	41.2	16.0	5.3	.0
Other engineering	100.0	94.5	26.7	20.7	29.0	18.0	5.1	.5
Sciences, total	100.0	95.1	44.0	23.9	13.8	13.5	4.7	.2
Physical sciences, total	100.0	93.4	56.4	8.7	23.1	5.2	6.3	.3
Astronomy	100.0	94.1	69.4	9.4	3.5	11.8	5.9	.0
Chemistry	100.0	94.9	53.7	9.0	29.1	3.1	4.6	.5
Physics	100.0	90.2	60.0	8.0	14.5	7.7	9.6	.2
Other physical sciences	100.0	100.0	40.0	10.0	20.0	30.0	.0	.0
Earth, atmospheric, and ocean sciences	100.0	93.4	43.4	18.9	15.1	16.1	6.4	.3
Mathematics	100.0	93.8	19.5	53.5	15.1	5.7	6.2	.0
Computer sciences	100.0	94.4	11.5	35.4	37.9	9.6	5.3	.3
Biological sciences	100.0	95.8	76.6	9.0	5.2	5.0	4.0	.2
Agricultural sciences	100.0	92.2	31.3	21.6	23.7	15.6	7.6	.3
Psychology	100.0	98.2	28.1	24.9	15.7	29.6	1.8	.0
Social sciences	100.0	93.5	7.9	58.0	8.6	19.0	6.3	.1
Non-S&E, total	100.0	97.0	4.7	54.9	6.3	31.2	2.9	.1
Grand total, all fields	100.0	95.8	25.5	35.9	13.4	20.9	4.1	.1
	Women							
Science and engineering, total	100.0	96.3	42.2	27.1	12.1	14.9	3.6	0.1
Engineering, total	100.0	96.4	27.0	20.5	34.2	14.7	3.6	.0
Aeronautical/astronautical	100.0	100.0	33.3	33.3	33.3	.0	.0	.0
Chemical	100.0	94.4	18.5	7.4	61.1	7.4	5.6	.0
Civil	100.0	100.0	21.2	21.2	30.3	27.3	.0	.0
Electrical	100.0	98.1	18.5	22.2	46.3	11.1	1.9	.0
Industrial	100.0	100.0	13.6	40.9	22.7	22.7	.0	.0
Materials/metallurgical	100.0	92.7	39.0	17.1	24.4	12.2	7.3	.0
Mechanical	100.0	96.0	28.0	24.0	20.0	24.0	4.0	.0
Other engineering	100.0	95.3	46.5	23.3	11.6	14.0	4.7	.0
Sciences, total	100.0	96.3	43.2	27.6	10.6	14.9	3.6	.1
Physical sciences, total	100.0	95.6	55.2	13.9	22.2	4.4	4.4	.0
Astronomy	100.0	100.0	88.2	11.8	.0	.0	.0	.0
Chemistry	100.0	96.3	53.7	13.3	26.0	3.3	3.7	.0
Physics	100.0	91.3	53.6	17.4	10.1	10.1	8.7	.0
Other physical sciences	100.0	100.0	50.0	0	50.0	0	0	.0
Earth, atmospheric, and ocean sciences	100.0	90.3	49.5	22.3	4.9	13.6	8.7	1.0
Mathematics	100.0	93.8	11.5	70.8	8.3	3.1	6.3	.0
Computer sciences	100.0	96.6	15.3	44.1	28.8	8.5	3.4	.0
Biological sciences	100.0	95.7	77.8	9.6	4.0	4.3	4.1	.2
Agricultural sciences	100.0	94.4	36.0	20.2	19.1	19.1	5.6	.0
Psychology	100.0	98.5	28.6	26.3	14.9	28.7	1.5	.0
Social sciences	100.0	95.3	8.8	62.7	6.8	17.0	4.7	.0
Non-S&E, total	100.0	97.9	5.0	56.2	6.0	30.7	2.0	.1
Grand total, all fields	100.0	97.2	22.7	42.3	8.9	23.2	2.8	.1

See explanatory information, if any, and SOURCE at end of table.

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Table 10. Percentage distribution of definite postgraduation plans of science and engineering (S&E) doctorate recipients, by sex and major field: 1994

[U.S. citizens and non-U.S. citizens with permanent visas]

Field of study	Definite plans	In the United States					Abroad	Location unknown
		Total in U.S.	Postdoc study	Academic employment	Industry employment	Other		
	Men							
Science and engineering, total	100.0	94.2	39.2	19.9	22.1	13.0	5.6	0.2
Engineering, total	100.0	93.4	17.9	13.7	47.1	14.7	6.3	.3
Aeronautical/astronautical	100.0	96.8	27.4	14.5	29.0	25.8	3.2	.0
Chemical	100.0	91.6	24.1	7.9	51.8	7.9	6.8	1.6
Civil	100.0	90.9	9.8	18.9	34.8	27.3	9.1	.0
Electrical	100.0	94.5	11.0	12.7	58.4	12.4	5.5	.0
Industrial	100.0	88.6	6.8	36.4	31.8	13.6	11.4	.0
Materials/metallurgical	100.0	91.2	31.6	2.9	47.1	9.6	8.1	.7
Mechanical	100.0	94.5	21.1	14.8	43.5	15.2	5.5	.0
Other engineering	100.0	94.3	21.8	20.1	33.3	19.0	5.2	.6
Sciences, total	100.0	94.4	44.6	21.4	15.9	12.5	5.4	.2
Physical sciences, total	100.0	92.8	56.8	7.2	23.3	5.4	6.8	.4
Astronomy	100.0	92.6	64.7	8.8	4.4	14.7	7.4	.0
Chemistry	100.0	94.4	53.7	7.4	30.3	3.0	4.9	.6
Physics	100.0	90.1	60.9	6.7	15.1	7.3	9.7	.2
Other physical sciences	100.0	100.0	37.5	12.5	12.5	37.5	.0	.0
Earth, atmospheric, and ocean sciences	100.0	94.5	41.2	17.6	18.7	17.0	5.5	.0
Mathematics	100.0	93.8	22.3	47.4	17.5	6.6	6.2	.0
Computer sciences	100.0	93.9	10.8	33.7	39.7	9.8	5.7	.3
Biological sciences	100.0	95.9	75.7	8.5	6.1	5.6	3.9	.2
Agricultural sciences	100.0	91.5	29.8	22.0	25.1	14.6	8.1	.3
Psychology	100.0	97.8	27.3	22.7	16.8	30.9	2.2	.0
Social sciences	100.0	92.2	7.3	54.3	10.0	20.5	7.6	.2
Non-S&E, total	100.0	95.9	4.2	53.2	6.7	31.8	4.1	.0
Grand total, all fields	100.0	94.7	27.7	30.9	17.0	19.2	5.1	.2

SOURCE: National Science Foundation/SRS, Survey of Earned Doctorates

Form Approved, OMB No. 3145-0019 Approval Expires 6/94

SURVEY OF EARNED DOCTORATES 1993-94

Please return this form to the GRADUATE DEAN for forwarding to
The Office of Scientific and Engineering Personnel, National Research Council • 2101 Constitution Avenue, N.W., Washington, D.C. 20418

Please print or type.

1. Name in full: _____ (Last Name) _____ (First Name) _____ (Middle Name)
Cross Reference: Maiden name or former name legally changed _____

2. Permanent address through which you could always be reached: (Care of, if applicable) _____
_____ (Number) _____ (Street) _____ (City)
_____ (State) _____ (Zip Code) _____ (Or Country if not U.S.)

3. U.S. Social Security Number: ___ ___ ___ - ___ ___ - ___ ___ ___ ___

4. Place of birth: _____ (State) _____ (or Country if not U.S.) Date of birth: _____ (Month) _____ (Day) _____ (Year)

5. Sex: 1 ☐ Male
2 ☐ Female

6. Marital status: 0 ☐ Single, never married
1 ☐ Married
2 ☐ Separated, divorced, widowed

7. Citizenship:
0 ☐ United States, native
1 ☐ United States, naturalized
Non-United States:
2 ☐ Permanent Resident of United States (Immigrant visa)
→ _____ (Country of present citizenship)
3 ☐ Temporary Resident of United States (Non-immigrant visa)
→ _____ (Country of present citizenship)

8. Are you a person with a disability? ☐ Yes ☐ No
If yes, is it: 1 ☐ Visual 2 ☐ Orthopedic (mobility)
3 ☐ Auditory (hearing) 4 ☐ Vocal
5 ☐ Other (specify) _____

9. What is your racial background? (Check only one.)
0 ☐ American Indian or Alaskan Native
1 ☐ Asian or Pacific Islander
2 ☐ Black
3 ☐ White

10. Are you Hispanic? ☐ No ☐ Yes → 0 ☐ Mexican American
1 ☐ Puerto Rican
2 ☐ Other Hispanic

11. How many dependents do you have? _____ Do not include yourself.
(Dependent = someone receiving at least one half of his or her support from you.)

EDUCATION

12. Location of high school/secondary school last attended: _____ (State) _____ (or Country if not U.S.) Date of graduation from high school: _____ (Month, Year)

13. List below, chronologically, all colleges (including 2-year) and graduate institutions you have attended and each degree earned (if any). Be sure to give the years attended for ALL institutions attended. Include your doctoral institution(s) (and degree) at the end.

Institution/Branch	State/Country	Years Attended From	Years Attended To	Field of Study: Use Specialties List Name	Field of Study: Use Specialties List Number	Degree (if any) Title	Degree (if any) Granted Mo	Degree (if any) Granted Yr
EXAMPLE *Genesee Community College*	*NY*	*79*	*81*	*Math*	*498*	*A.S.*	*6*	*83*
SUNY, Buffalo	*NY*	*81*	*83*	*Computer Science*	*400*	*B.S.*	*6*	*83*

If a baccalaureate degree (or equivalent) was never received, please check box ☐

14. How many years were you a **full-time** student between receiving your first baccalaureate degree (or equivalent) and receiving your doctorate (include the period spent on your thesis and/or dissertation) _____ (whole numbers)

15. Identify the field of your dissertation research and enter below the title of your dissertation. If a project report or a musical or literary composition is a degree requirement in lieu of a dissertation, please check box ☐ Name of field _____ Number of field _____ (Use Specialties List)
Title _____

16. Name the department (or interdisciplinary committee, center, institute, etc.) and school or college of the university which supervised your doctoral program.
_____ (Department/Institute/Committee/Program) _____ (School)

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(continued on next page)

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